2007.10

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Renesas Transistors/Thyristors/Triacs Status List

Renesas Technology
www.renesas.com

New-Generation Power MOS FET: Low Loss MOS FET " JET " (10th Gen.)

Contact: PW

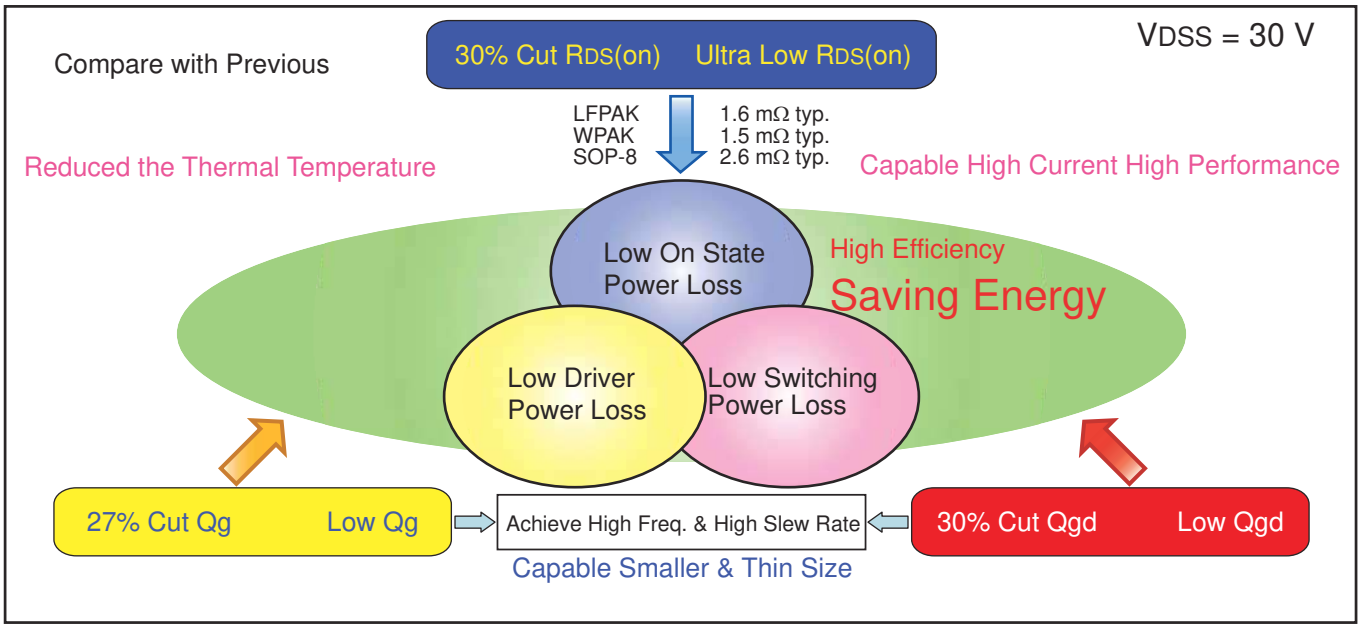
Optimized Process Design for Voltage Regulator to Achieve High Efficiency and Smaller Solution

*JET: Renesas internal development name

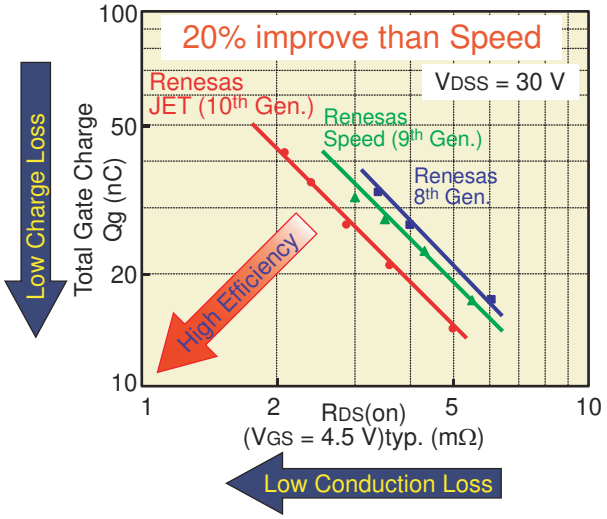
Application

- Voltage Regulator: CPU Core,GPU, Chipset and Memory (N/B PC, Server, VGA, POL)
- Synchronous Rectification for Brick Converter (Telecom, Network, Server)

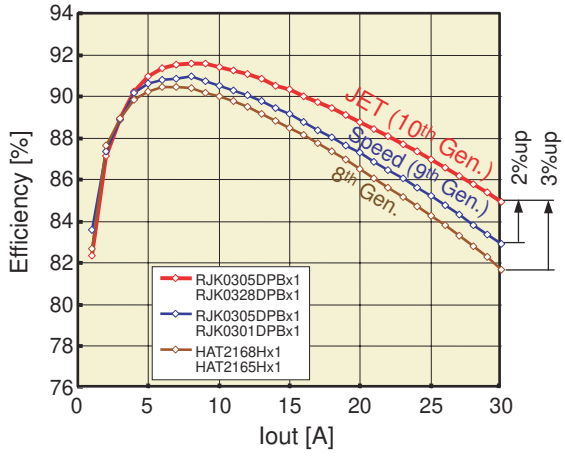
Features and Advantage



- High Performance (FOM: Figure of Merit)



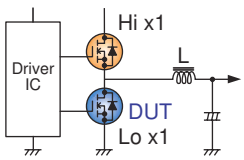
- High Efficiency



Lineup

			RDS(on) (VGS = 4.5 V)(mΩ)		Qg (nC)	Qgd (nC)	Note
	LFPAK	RJK0328DPB	2.1 typ.	2.9 max.	8.8	42	5 devices
	WPAK	RJK0346DPA	1.9 typ.	2.7 max.	10.5	49	11 devices
	SOP-8	RJK0348DSP	3.2 typ.	4.5 max.	7.0	34	9 devices

<Test Conditions>



Vin = 12 V, Vout = 1.2 V
VDR = 5 V, fsw = 500 kHz
Ta = 25°C, L = 0.45 µH
No Air Flow

Index

■2SA Series

Part No.	Package	Page	Contact
673	TO-92(1)	8	HF
673A	TO-92(1)	8	HF
1052	MPAK	8	HF
1084	TO-92(1)	8	HF
1085	TO-92(1)	8	HF
1121	MPAK	8	HF
1122	MPAK	8	HF
1188	TO-92(1)	8	HF
1190	TO-92(1)	8	HF
1566	MPAK	8	HF

■2SB Series

Part No.	Package	Page	Contact
562	TO-92MOD	8	HF
831	MPAK	8	HF
1001	UPAK	8	HF
1002	UPAK	8	HF
1025	UPAK	8	HF
1026	UPAK	8	HF
1028	UPAK	8	HF
1691	MPAK	8	HF

■2SC Series

Part No.	Package	Page	Contact
1213	TO-92(1)	8	HF
1213A	TO-92(1)	8	HF
1214	TO-92(1)	8	HF
1472(K)	TO-92(1)	8	HF
1906	TO-92(2)	7	HF
1907	TO-92(2)	7	HF
2462	MPAK	8	HF
2463	MPAK	8	HF
2545	TO-92(1)	8	HF
2546	TO-92(1)	8	HF
2547	TO-92(1)	8	HF
2610	TO-92MOD	8	HF
2618	MPAK	8	HF
2620	MPAK	7	HF
2734	MPAK	7	HF
2735	MPAK	7	HF
2853	TO-92(1)	8	HF
3127	MPAK	7	HF
3380	UPAK	8	HF
4050	MPAK	8	HF
4197	MPAK	7	HF
4260	CMPAK	7	HF
4261	CMPAK	7	HF
4264	CMPAK	7	HF
4265	CMPAK	7	HF
4537	CMPAK	7	HF
4702	MPAK	8	HF
4807	UPAK	7	HF
4901	CMPAK	7	HF
4926	MPAK-4	7	HF
4965	CMPAK	7	HF
4988	UPAK	7	HF
5081	CMPAK-4	7	HF
5543	MFPAK	7	HF
5545	MPAK-4	7	HF
5555	MFPAK	7	HF
5594	CMPAK-4	7	HF
5624	CMPAK-4	7	HF
5631	UPAK	7	HF
5700	MFPAK	7	HF
5772	MPAK	7	HF
5773	MPAK	7	HF
5820	CMPAK-4	7	HF
5850	CMPAK	8	HF
5890	MPAK	7	HF
5945	TNP-6DTV	7	HF
5998	MPAK	7	HF

■2SD Series

Part No.	Package	Page	Contact
467	TO-92(1)	8	HF
468	TO-92MOD	8	HF
655	TO-92(1)	8	HF
667	TO-92MOD	8	HF
667A	TO-92MOD	8	HF
789	TO-92MOD	8	HF
974	TO-92MOD	8	HF
1209(K)	TO-92MOD	8	HF
1306	MPAK	8	HF
1368	UPAK	8	HF
1418	UPAK	8	HF
1419	UPAK	8	HF
1421	UPAK	8	HF
1470	UPAK	8	HF
1472	UPAK	8	HF
1974	UPAK	8	HF
2655	MPAK	8	HF

■2SJ Series

Part No.	Package	Page	Contact
76	TO-220AB	16	PW
77	TO-220AB	16	PW
78	TO-220AB	16	PW
79	TO-220AB	16	PW
130(L)	DPAK(L)-(1)	14	PW
130(S)	DPAK(S)	14	PW
160	TO-3P	16	PW
161	TO-3P	16	PW
162	TO-3P	16	PW
181(L)	DPAK(L)-(1)	14	PW
181(S)	DPAK(S)	14	PW
186	UPAK	14	HF
216	TO-3PFM	12	PW
217	TO-3P	12	PW
218	TO-3PFM	12	PW
221	TO-220AB	10	PW
222	TO-220FM	11	PW
244	UPAK	10	HF
247	TO-220AB	10	PW
248	TO-220FM	11	PW
278	UPAK	10	HF
317	UPAK	10	HF
319(L)	DPAK(L)-(1)	14	PW
319(S)	DPAK(S)	14	PW
350	TO-220FM	11	PW
351	TO-3P	16	PW
352	TO-3P	16	PW
386	TO-92MOD	10	HF
387(L)	DPAK(L)-(2)	10	PW
387(S)	DPAK(S)	10	PW

■2SJ Series

Part No.	Package	Page	Contact
399	MPAK	10	HF
451	MPAK	10	HF
471	TO-220CFM	11	PW
479(L)	LDPAK(L)	11	PW
479(S)	LDPAK(S)-(1)	11	PW
483	TO-92MOD	10	HF
484	UPAK	10	HF
486	MPAK	10	HF
496	TO-92MOD	10	HF
504	TO-220FM	11	PW
505(L)	LDPAK(L)	11	PW
505(S)	LDPAK(S)-(1)	11	PW
506(L)	DPAK(L)-(2)	10	PW
506(S)	DPAK(S)	10	PW
517	UPAK	10	HF
518	UPAK	10	HF
526	TO-220FM	11	PW
527(L)	DPAK(L)-(1)	10	PW
527(S)	DPAK(S)	10	PW
528(L)	DPAK(L)-(2)	10	PW
528(S)	DPAK(S)	10	PW
529(L)	DPAK(L)-(2)	10	PW
529(S)	DPAK(S)	10	PW
530(L)	DPAK(L)-(2)	10	PW
530(S)	DPAK(S)	10	PW
531	TO-220CFM	11	PW
532	TO-220CFM	11	PW
533	TO-220CFM	11	PW
534	TO-220FM	11	PW
535	TO-220FM	11	PW
539	TO-220AB	10	PW
540	TO-220AB	10	PW
541	TO-220AB	10	PW
542	TO-220AB	10	PW
543	TO-220AB	10	PW
544	TO-220AB	10	PW
545	TO-220CFM	11	PW
546	TO-220CFM	11	PW
547	TO-220FM	11	PW
548	TO-220FM	11	PW
549(L)	LDPAK(L)	11	PW
549(S)	LDPAK(S)-(1)	11	PW
550(L)	LDPAK(L)	11	PW
550(S)	LDPAK(S)-(1)	11	PW
551(L)	LDPAK(L)	11	PW
551(S)	LDPAK(S)-(1)	11	PW
552(L)	LDPAK(L)	11	PW
552(S)	LDPAK(S)-(1)	11	PW
553(L)	LDPAK(L)	11	PW
553(S)	LDPAK(S)-(1)	11	PW
554	TO-3P	12	PW
555	TO-3P	12	PW
574	MPAK	8	HF
576	CMPAK	8	HF
586	CMPAK	8	HF

■2SK Series

Part No.	Package	Page	Contact
213	TO-220AB	16	PW
214	TO-220AB	16	PW
215	TO-220AB	16	PW
216	TO-220AB	16	PW
360	MPAK	7	HF
435	TO-92(2)	8	HF
740	TO-220AB	11	PW
975	TO-92MOD	10	HF
1056	TO-3P	16	PW
1057	TO-3P	16	PW
1058	TO-3P	16	PW
1070	MPAK	8	HF
1151(L)	DPAK(L)-(1)	14	PW
1151(S)	DPAK(S)	14	PW
1152(L)	DPAK(L)-(1)	14	PW
1152(S)	DPAK(S)	14	PW
1153	TO-220AB	14	PW
1154	TO-220AB	14	PW
1155	TO-220AB	14	PW
1156	TO-220AB	14	PW
1157	TO-220AB	14	PW
1158	TO-220AB	14	PW
1161	TO-3P	14	PW
1162	TO-3P	14	PW
1165	TO-3P	14	PW
1166	TO-3P	14	PW
1167	TO-3P	14	PW
1168	TO-3P	14	PW
1169	TO-3P	14	PW
1170	TO-3P	14	PW
1215	CMPAK	7	HF
1254(L)	DPAK(L)-(1)	10	PW
1254(S)	DPAK(S)	10	PW
1298	TO-3PFM	12	PW
1299(L)	DPAK(L)-(1)	10	PW
1299(S)	DPAK(S)	10	PW
1300	TO-220AB	10	PW
1301	TO-220AB	11	PW
1302	TO-220AB	11	PW
1303	TO-3P	12	PW
1304	TO-3P	12	PW
1305	TO-220FM	11	PW
1306	TO-220FM	11	PW
1307	TO-220FM	11	PW
1313(L)	LDPAK(L)	14	PW
1313(S)	LDPAK(S)-(1)	14	PW
1314(L)	LDPAK(L)	14	PW
1314(S)	LDPAK(S)-(1)	14	PW
1315(L)	LDPAK(L)	14	PW
1315(S)	LDPAK(S)-(1)	14	PW
1316(L)	LDPAK(L)	14	PW
1316(S)	LDPAK(S)-(1)	14	PW
1317	TO-3P	15	PW
1318	TO-220FM	11	PW
1328	TO-3PFM	15	PW
1329	TO-3PFM	15	PW
1334	UPAK	14	HF
1336	TO-92(1)	10	HF
1337	TO-92(1)	10	HF
1338	TO-220AB	14	PW
1339	TO-3P	15	PW
1340	TO-3P	15	PW
1341	TO-3P	15	PW

■2SK Series

Part No.	Package	Page	Contact
1342	TO-3P	15	PW
1400A	TO-220AB	14	PW
1402A	TO-220AB	14	PW
1403A	TO-3P	15	PW
1404	TO-220FM	14	PW
1405	TO-3PFM	15	PW
1515	TO-3P	14	PW
1516	TO-3P	15	PW
1517	TO-3P	14	PW
1518	TO-3P	15	PW
1519	TO-3PL	15	PW
1520	TO-3PL	15	PW
1521	TO-3PL	15	PW
1522	TO-3PL	15	PW
1526	TO-3PL	15	PW
1527	TO-3PL	15	PW
1528(L)	LDPAK(L)	14	PW
1528(S)	LDPAK(S)-(1)	14	PW
1540(L)	LDPAK(L)	14	PW
1540(S)	LDPAK(S)-(1)	14	PW
1566	TO-220FM	14	PW
1567	TO-220FM	14	PW
1573	TO-3P	15	PW
1579	UPAK	10	HF
1620(L)	LDPAK(L)	11	PW
1620(S)	LDPAK(S)-(1)	11	PW
1623(L)	LDPAK(L)	11	PW
1623(S)	LDPAK(S)-(1)	11	PW
1628	TO-3PL	15	PW
1629	TO-3PL	15	PW
1636(L)	LDPAK(L)	14	PW
1636(S)	LDPAK(S)-(1)	14	PW
1637	TO-220FM	14	PW
1647(L)	LDPAK(L)	14	PW
1647(S)	LDPAK(S)-(1)	14	PW
1667	TO-220AB	14	PW
1668	TO-220FM	14	PW
1669	TO-3P	14	PW
1670	TO-3PFM	15	PW
1671	TO-3P	14	PW
1697	UPAK	10	HF
1761	TO-220AB	14	PW
1762	TO-220FM	14	PW
1764	UPAK	10	HF
1772	UPAK	10	HF
1773	TO-3P	15	PW
1775	TO-3PFM	15	PW
1807	TO-220AB	14	PW
1808	TO-220FM	14	PW
1832	TO-3PFM	15	PW
1835	TO-3P	15	PW
1837	TO-3PL	15	PW
1838(L)	DPAK(L)-(1)	14	PW
1838(S)	DPAK(S)	14	PW
1859	TO-3PFM	15	PW
1880(L)	DPAK(L)-(1)	14	PW
1880(S)	DPAK(S)	14	PW
1933	TO-3P	15	PW
1934	TO-3P	15	PW
1947	TO-3PL	15	PW
1948	TO-3PL	15	PW
1957	TO-220FM	14	PW
1968	TO-3P	15	PW
1971	TO-3PL	15	PW
2007	TO-3P	14	PW
2008	TO-3PFM	15	PW
2084(L)	DPAK(L)-(2)	10	PW
2084(S)	DPAK(S)	10	PW
2085	TO-92MOD	10	HF
2096	TO-3P	12	PW
2114	TO-220CFM	14	PW
2202	TO-220FM	11	PW
2220	TO-3P	16	PW
2221	TO-3P	16	PW
2225	TO-3PFM	15	PW
2315	UPAK	9	HF
2329(L)	DPAK(L)-(2)	10	PW
2329(S)	DPAK(S)	10	PW
2373	MPAK	10	HF
2393	TO-3PL	15	PW
2408	TO-220AB	14	PW
2425	TO-220CFM	14	PW
2529	TO-220CFM	11	PW
2553(L)	LDPAK(L)	11	PW
2553(S)	LDPAK(S)-(1)	11	PW
2554	TO-3P	12	PW
2568	TO-3P	15	PW
2569	MPAK	10	HF
2570	MPAK	10	HF
2586	TO-3P	12	PW
2595	RP8P	6	PW
2596	UPAK	6	PW
2684(L)	LDPAK(L)	11	PW
2684(S)	LDPAK(S)-(1)	11	PW
2727	TO-3P	12	PW
2728	TO-3P	12	PW
2729	TO-3P	12	PW
2730	TO-3P	12	PW
2735(L)	DPAK(L)-(2)	10	PW
2735(S)	DPAK(S)	10	PW
2736	TO-220CFM	11	PW
2737	TO-220CFM	11	PW
2738	TO-220CFM	11	PW
2788	UPAK	10	HF
2796(L)	DPAK(L)-(1)	10	PW
2796(S)	DPAK(S)	10	PW
2800	TO-220AB	10	PW
2851	TO-92MOD	9	HF
2869(L)	DPAK(L)-(2)	10	PW
2869(S)	DPAK(S)	10	PW
2912(L)	LDPAK(L)	11	PW
2912(S)	LDPAK(S)-(1)	11	PW
2925(L)	DPAK(L)-(2)	10	PW
2925(S)	DPAK(S)	10	PW
2926(L)	DPAK(L)-(2)	10	PW
2926(S)	DPAK(S)	10	PW
2927	TO-220AB	10	PW
2928	TO-220AB	10	PW
2929	TO-220AB	10	PW
2930	TO-220AB	10	PW

■2SK Series

Part No.	Package	Page	Contact
2931	TO-220AB	10	PW
2932	TO-220CFM	11	PW
2933	TO-220CFM	11	PW
2934	TO-220CFM	11	PW
2935	TO-220CFM	11	PW
2936	TO-220CFM	11	PW
2937	TO-220FM	11	PW
2938(L)	LDPAK(L)	11	PW
2938(S)	LDPAK(S)-(1)	11	PW
2939(L)	LDPAK(L)	11	PW
2939(S)	LDPAK(S)-(1)	11	PW
2940(L)	LDPAK(L)	11	PW
2940(S)	LDPAK(S)-(1)	11	PW
2955	TO-3P	12	PW
2956	TO-220CFM	11	PW
2958(L)	LDPAK(L)	11	PW
2958(S)	LDPAK(S)-(1)	11	PW
2959	TO-220AB	10	PW
2978	UPAK	10	HF
2980	MPAK	10	HF
3000	MPAK	10	HF
3069	TO-220AB	10	PW
3070(L)	LDPAK(L)	11	PW
3070(S)	LDPAK(S)-(1)	11	PW
3082(L)	LDPAK(L)	11	PW
3082(S)	LDPAK(S)-(1)	11	PW
3134(L)	LDPAK(L)	11	PW
3134(S)	LDPAK(S)-(1)	11	PW
3135(L)	LDPAK(L)	11	PW
3135(S)	LDPAK(S)-(1)	11	PW
3136	TO-220AB	10	PW
3140	TO-220CFM	11	PW
3141	TO-220AB	10	PW
3142	TO-220CFM	11	PW
3147(L)	DPAK(L)-(2)	10	PW
3147(S)	DPAK(S)	10	PW
3148	TO-220FM	11	PW
3149	TO-220AB	11	PW
3150(L)	LDPAK(L)	11	PW
3150(S)	LDPAK(S)-(2)	11	PW
3151	TO-3P	12	PW
3152	TO-220FM	11	PW
3153	TO-220FM	11	PW
3154	TO-220AB	11	PW
3155	TO-220FM	11	PW
3156	TO-220AB	11	PW
3157	TO-220FM	11	PW
3158	TO-220AB	11	PW
3159	TO-3P	12	PW
3160	TO-220FM	14	PW
3161(L)	LDPAK(L)	14	PW
3161(S)	LDPAK(S)-(1)	14	PW
3162	TO-220FM	14	PW
3163	TO-3P	12	PW
3177	TO-220FM	14	PW
3209	TO-220FM	11	PW
3210(L)	LDPAK(L)	11	PW
3210(S)	LDPAK(S)-(1)	11	PW
3211(L)	LDPAK(L)	14	PW
3211(S)	LDPAK(S)-(1)	14	PW
3212	TO-220FM	11	PW
3228	TO-220AB	10	PW
3229	TO-220CFM	11	PW
3274(L)	DPAK(L)-(2)	10	PW
3274(S)	DPAK(S)	10	PW
3287	MPAK	8	HF
3288	MPAK	8	HF
3289	CMPAK	8	HF
3290	MPAK	8	HF
3348	CMPAK	8	HF
3378	CMPAK	8	HF
3390	RP8P	6	HF
3391	UPAK	6	HF
3418	TO-220AB	10	PW
3419	TO-3P	12	PW
3446	TO-92MOD	10	PW
3447	TO-92MOD	10	PW
3736	TO-220AB	14	PW
4093	TO-92MOD	14	PW
4150	TO-92(1)	14	PW
4151	TO-92(1)	10	PW

■3SK Series

Part No.	Package	Page	Contact
295	MPAK-4	7	HF
296	CMPAK-4	7	HF
297	MPAK-4	7	HF
298	CMPAK-4	7	HF
300	MPAK-4	7	HF
317	CMPAK-4	7	HF
318	CMPAK-4	7	HF
319	MPAK-4	7	HF
323	MPAK-4	7	HF
324	CMPAK-4	7	HF

■BB FET Series

Part No.	Package	Page	Contact
301C	CMPAK-4	7	HF
301M	MPAK-4	7	HF
302M	MPAK-4	7	HF
304C	CMPAK-4	7	HF
305C	CMPAK-4	7	HF
305M	MPAK-4	7	HF
501C	CMPAK-4	7	HF
502C	CMPAK-4	7	HF
502M	MPAK-4	7	HF
503C	CMPAK-4	7	HF
503M	MPAK-4	7	HF
504C	CMPAK-4	7	HF
504M	MPAK-4	7	HF
505C	CMPAK-4	7	HF
505M	MPAK-4	7	HF
506C	CMPAK-4	7	HF

■BCR Series

Part No.	Package	Page	Contact
08AM-12A	TO-92*	18	PW
08AM-14A	TO-92*	18	PW
08AS-12	UPAK/ (SOT-89)**	18	PW
1AM-12	TO-92*	18	PW
1AM-12A	TO-92*	18	PW
2PM-12RE	TO-220F(2)	18	PW

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■BCR Series

Part No.	Package	Page	Contact
2PM-14LE	TO-220F(2)	18	PW
3AS-12(A)	MP-3A DPAK(L)-(3)	18	PW
3AS-12(B)	MP-3A	18	PW
3KM-12(RA)	TO-220FN	18	PW
3KM-12(RB)	TO-220FN	18	PW
3KM-12LA	TO-220FN	18	PW
3KM-12LB	TO-220FN	18	PW
3KM-14L	TO-220FN	18	PW
3PM-12L(A)	TO-220F(1)	18	PW
3PM-12L(B)	TO-220F(1)	18	PW
3PM-12LG	TO-220F(1)	18	PW
3PM-14LG	TO-220F(1)	18	PW
5AM-12L(A)	TO-220	18	PW
5AM-12L(B)	TO-220	18	PW
5AS-12(A)	MP-3A DPAK(L)-(3)	18	PW
5AS-12(B)	MP-3A	18	PW
5AS-14(A)	MP-3A	18	PW
5KM-12(RA)	TO-220FN	18	PW
5KM-12(RB)	TO-220FN	18	PW
5KM-12LA	TO-220FN	18	PW
5KM-12LB	TO-220FN	18	PW
5KM-14LA	TO-220FN	18	PW
5KM-14LC	TO-220FN	18	PW
5PM-12L(A)	TO-220F(1)	18	PW
5PM-12L(B)	TO-220F(1)	18	PW
5PM-12LG	TO-220F(1)	18	PW
5PM-14L(A)	TO-220F(1)	18	PW
5PM-14LD	TO-220F(1)	18	PW
5PM-14LG	TO-220F(1)	18	PW
6AM-12L(A)	TO-220	18	PW
6AM-12L(B)	TO-220	18	PW
8CM-12L(A)	TO-220	18	PW
8CM-12L(B)	TO-220	18	PW
8CS-12L(A)	TO-220S	18	PW
8CS-12L(B)	TO-220S	18	PW
8KM-12LA	TO-220FN	18	PW
8KM-12LB	TO-220FN	18	PW
8KM-12LC	TO-220FN	18	PW
8KM-14LA	TO-220FN	18	PW
8KM-14LC	TO-220FN	18	PW
8KM-16LA	TO-220FN	18	PW
8KM-20LA	TO-220FN	18	PW
8PM-12L(A)	TO-220F(1)	18	PW
8PM-12L(B)	TO-220F(1)	18	PW
8PM-12LD	TO-220F(1)	18	PW
8PM-12LG	TO-220F(1)	18	PW
8PM-14L(A)	TO-220F(1)	18	PW
8PM-14LD	TO-220F(1)	18	PW
8PM-14LG	TO-220F(1)	18	PW
8PM-16L(A)	TO-220F(1)	18	PW
8PM-16LG	TO-220F(1)	18	PW
10CM-12L(A)	TO-220	18	PW
10CM-12L(B)	TO-220	18	PW
10CS-12L(A)	TO-220S	18	PW
10CS-12L(B)	TO-220S	18	PW
10KM-12LA	TO-220FN	18	PW
10KM-12LB	TO-220FN	18	PW
10KM-12LC	TO-220FN	18	PW
10PM-12L(A)	TO-220F(1)	18	PW
10PM-12L(B)	TO-220F(1)	18	PW
10PM-12LD	TO-220F(1)	18	PW
10PM-12LG	TO-220F(1)	18	PW
12CM-12L(A)	TO-220	18	PW
12CM-12L(B)	TO-220	18	PW
12CS-12L(A)	TO-220S	18	PW
12CS-12L(B)	TO-220S	18	PW
12KM-12LA	TO-220FN	18	PW
12KM-12LB	TO-220FN	18	PW
12KM-14LA	TO-220FN	18	PW
12PM-12L(A)	TO-220F(1)	18	PW
12PM-12L(B)	TO-220F(1)	18	PW
12PM-12LD	TO-220F(1)	18	PW
12PM-12LG	TO-220F(1)	18	PW
12PM-14L(A)	TO-220F(1)	18	PW
12PM-14LG	TO-220F(1)	18	PW
16CM-12L(A)	TO-220	18	PW
16CM-12L(B)	TO-220	18	PW
16CS-12L(A)	TO-220S	18	PW
16CS-12L(B)	TO-220S	18	PW
16KM-12LA	TO-220FN	18	PW
16KM-12LB	TO-220FN	18	PW
16KM-12LC	TO-220FN	18	PW
16PM-12L(A)	TO-220F(1)	18	PW
16PM-12L(B)	TO-220F(1)	18	PW
16PM-12LD	TO-220F(1)	18	PW
16PM-12LG	TO-220F(1)	18	PW
20AM-12L(A)	TO-220	18	PW
20AM-12L(B)	TO-220	18	PW
20KM-12L(A)	TO-220FN	18	PW
20KM-12L(B)	TO-220FN	18	PW
20RM-30LA	TO-3PFM	18	PW
25KM-12LA	TO-220FN	18	PW
25KM-12LB	TO-220FN	18	PW
30AM-12L(A)	TO-3P*	18	PW
30AM-12L(B)	TO-3P*	18	PW
30KM-8LA	TO-220FN	18	PW
30KM-8LB	TO-220FN	18	PW

■CR Series

Part No.	Package	Page	Contact
02AM-8	TO-92* TO-92(3)	18	PW
03AM-12	TO-92* TO-92(3)	18	PW
03AM-16	TO-92* TO-92(3)	18	PW
04AM-12	TO-92* TO-92(3)	18	PW
05AM-12	TO-92* TO-92(3)	18	PW
05AM-16	TO-92* TO-92(3)	18	PW
05AS-8	UPAK/ (SOT-89)**	18	PW
05BM-12	TO-92* TO-92(3)	18	PW
05BS-8	MPAK/ (SC-59)**	18	PW
08AS-12	UPAK/ (SOT-89)**	18	PW

■CR Series

Part No.	Package	Page	Contact
3KM-12	TO-220FN	18	PW
3PM-12	TO-220F(1)	18	PW
5AS-12	MP-3A	18	PW
6CM-12A	TO-220	18	PW
6KM-12A	TO-220FN	18	PW
6PM-12A	TO-220F(1)	18	PW
8CM-12A	TO-220	18	PW
8KM-12A	TO-220FN	18	PW
8PM-12A	TO-220F(1)	18	PW
12CM-12A	TO-220	18	PW
12PM-12A	TO-220F(1)	18	PW

■CT Series

Part No.	Package	Page	Contact
40KM-8H	TO-220FN	17	PW

■CY Series

Part No.	Package	Page	Contact
20AAJ-8	FP-8DA	17	PW
20AAJ-8F	FP-8DA	17	PW
20AAJ-8H	FP-8DA	17	PW
25AAJ-8	FP-8DA	17	PW
25AAJ-8F	FP-8DA	17	PW
25BAH-8F	TTP-8DV	17	PW
25BAJ-8F	TTP-8DV	17	PW
25CAH-8F	VSON-8	17	PW
25CAJ-8F	VSON-8	17	PW

■Dr MOS Series

Part No.	Package	Page	Contact
R2J20601NP	QFN56	16	PW
R2J20602NP	QFN56	16	PW

■FS Series

Part No.	Package	Page	Contact
5AS-06	MP-3A	10	PW
5AS-2	MP-3A	10	PW
5ASJ-06F	MP-3A	10	PW
5ASJ-2	MP-3A	10	PW
5ASJ-3	MP-3A	10	PW
10AS-06	MP-3A	10	PW
10AS-2	MP-3A	10	PW
10AS-3	MP-3A	10	PW
10ASJ-06F	MP-3A	10	PW
10ASJ-2	MP-3A	10	PW
10ASJ-3	MP-3A	10	PW
30AS-06	MP-3A	10	PW
30AS-2	MP-3A	10	PW
30ASJ-06F	MP-3A	10	PW
30ASJ-2	MP-3A	10	PW
30KM-3	TO-220FN	11	PW
30KMJ-06F	TO-220FN	11	PW
30KMJ-2	TO-220FN	11	PW
30KMJ-3	TO-220FN	11	PW
30VSJ-3	TO-220S	12	PW
50ASJ-03F	MP-3A	10	PW
50KM-06	TO-220FN	11	PW
50KM-2	TO-220FN	11	PW
50KM-3	TO-220FN	11	PW
50KMJ-03F	TO-220FN	11	PW
50KMJ-06F	TO-220FN	11	PW
50KMJ-2	TO-220FN	11	PW
50KMJ-3	TO-220FN	11	PW
50SM-3	TO-3P*	12	PW
50SMJ-3	TO-3P*	12	PW
50UM-3	TO-220	11	PW
50UMJ-3	TO-220	11	PW
50VSJ-2	TO-220S	12	PW
70KM-06	TO-220FN	11	PW
70KM-2	TO-220FN	11	PW
70KMJ-03F	TO-220FN	11	PW
70KMJ-06F	TO-220FN	11	PW
70KMJ-2	TO-220FN	11	PW
70SM-06	TO-3P*	12	PW
70SMJ-2	TO-3P*	12	PW
70UM-06	TO-220	11	PW
70UM-2	TO-220	11	PW
70UMJ-06F	TO-220	11	PW
70UMJ-2	TO-220	11	PW
70VSJ-06F	TO-220S	12	PW
100KMJ-03F	TO-220FN	11	PW
100UMJ-03F	TO-220	11	PW
100VSJ-03F	TO-220S	12	PW

■FX Series

Part No.	Package	Page	Contact
3ASJ-3	MP-3A	10	PW
6ASJ-03	MP-3A	10	PW
6ASJ-06	MP-3A	10	PW
6ASJ-2	MP-3A	10	PW
6ASJ-3	MP-3A	10	PW
20ASJ-03F	MP-3A	10	PW
20ASJ-06	MP-3A	10	PW
20ASJ-2	MP-3A	10	PW
20KMJ-06	TO-220FN	11	PW
20KMJ-2	TO-220FN	11	PW
20KMJ-3	TO-220FN	11	PW
30ASJ-03	MP-3A	10	PW
30KMJ-06	TO-220FN	11	PW
30KMJ-2	TO-220FN	11	PW
30KMJ-3	TO-220FN	11	PW
30SMJ-3	TO-3P*	12	PW
50KMJ-03	TO-220FN	11	PW
50KMJ-06	TO-220FN	11	PW
50KMJ-2	TO-220FN	11	PW
50SMJ-06	TO-3P*	12	PW
50SMJ-2	TO-3P*	12	PW
70KMJ-03	TO-220FN	11	PW
70SMJ-03	TO-3P*	12	PW

■GN Series

Part No.	Package	Page	Contact
4008ZB4	DPAK(L)-(2)/ (S)	17	PW
4014ZB4	LDPAK(L)/(S)	17	PW
6030V5CF	TO-220CFM	17	PW

■H5N Series

Part No.	Package	Page	Contact
1501LD	LDPAK(L)	11	PW
1501LM	LDPAK(S)-(2)	12	PW
1501LS	LDPAK(S)-(1)	12	PW
1503P	TO-3P	12	PW
1506P	TO-3P	12	PW
2001LD	LDPAK(L)	14	PW
2001LM	LDPAK(S)-(2)	14	PW
2001LS	LDPAK(S)-(1)	14	PW

■H5N Series

Part No.	Package	Page	Contact
2003P	TO-3P	14	PW
2004DL	DPAK(L)-(2)	14	PW
2004DS	DPAK(S)	14	PW
2005DL	DPAK(L)-(2)	14	PW
2005DS	DPAK(S)	14	PW
2007FN	TO-220FN	14	PW
2008P	TO-3P	14	PW
2301PF	TO-3PFM	15	PW
2305P	TO-3P	14	PW
2305PF	TO-3PFM	15	PW
2306PF	TO-3PFM	15	PW
2501LD	LDPAK(L)	14	PW
2501LM	LDPAK(S)-(2)	14	PW
2501LS	LDPAK(S)-(1)	14	PW
2501P	TO-3P	14	PW
2502CF	TO-220CFM	14	PW
2503P	TO-3P	14	PW
2504DL	DPAK(L)-(2)	14	PW
2504DS	DPAK(S)	14	PW
2505DL	DPAK(L)-(2)	14	PW
2505DS	DPAK(S)	14	PW
2507P	TO-3P	14	PW
2508DL	DPAK(L)-(2)	14	PW
2508DS	DPAK(S)	14	PW
2509P	TO-3P	14	PW
2509PF	TO-3PFM	15	PW
2510DL	DPAK(L)-(2)	14	PW
2510DS	DPAK(S)	14	PW
2512CF	TO-220CFM	14	PW
2512FN	TO-220FN	14	PW
2513PL	TO-3PL	15	PW
2514P	TO-3P	14	PW
2515P	TO-3P	14	PW
2517FN	TO-220FN	14	PW
2519P	TO-3P	14	PW
2801P	TO-3P	14	PW
2801PL	TO-3PL	15	PW
2802P	TO-3P	15	PW
2802PF	TO-3PFM	15	PW
2803P	TO-3P	15	PW
2803PF	TO-3PFM	15	PW
2901FN	TO-220FN	14	PW
3003P	TO-3P	14	PW
3004P	TO-3P	14	PW
3005LD	LDPAK(L)	14	PW
3005LM	LDPAK(S)-(2)	14	PW
3005LS	LDPAK(S)-(1)	14	PW
3007CF	TO-220CFM	14	PW
3007FN	TO-220FN	14	PW
3008P	TO-3P	14	PW
3011P	TO-3P	14	PW
5004PL	TO-3PL	15	PW
5005PL	TO-3PL	12	PW
5006DL	DPAK(L)-(2)	14	PW
5006DS	DPAK(S)	14	PW
5006FM	TO-220FM	14	PW
5006LD	LDPAK(L)	14	PW
5006LM	LDPAK(S)-(2)	14	PW
5006LS	LDPAK(S)-(1)	14	PW
5007P	TO-3P	15	PW
5011PL	TO-3PL	15	PW
5012P	TO-3P	15	PW
5015P	TO-3P	15	PW
5016PL	TO-3PL	15	PW
6001P	TO-3P	15	PW
6004PL	TO-3PL	15	PW

■H5P Series

Part No.	Package	Page	Contact
2501LD	LDPAK(L)	14	PW
2501LM	LDPAK(S)-(2)	14	PW
2501LS	LDPAK(S)-(1)	14	PW

■H7N Series

Part No.	Package	Page	Contact
0203AB	TO-220AB	10	PW
0307AB	TO-220AB	10	PW
0307LD	LDPAK(L)	11	PW
0307LM	LDPAK(S)-(2)	12	PW
0307LS	LDPAK(S)-(1)	11	PW
0308AB	TO-220AB	10	PW
0308CF	TO-220CFM	11	PW
0308LD	LDPAK(L)	11	PW
0308LM	LDPAK(S)-(2)	12	PW
0308LS	LDPAK(S)-(1)	11	PW
0310LD	LDPAK(L)	11	PW
0310LM	LDPAK(S)-(2)	12	PW
0310LS	LDPAK(S)-(1)	11	PW
0311LD	LDPAK(L)	11	PW
0311LM	LDPAK(S)-(2)	12	PW
0311LS	LDPAK(S)-(1)	11	PW
0312AB	TO-220AB	10	PW
0312LD	LDPAK(L)	11	PW
0312LM	LDPAK(S)-(2)	12	PW
0312LS	LDPAK(S)-(1)	11	PW
0401LD	LDPAK(L)	11	PW
0401LM	LDPAK(S)-(2)	12	PW
0401LS	LDPAK(S)-(1)	11	PW
0405LD	LDPAK(L)	11	PW
0405LM	LDPAK(S)-(2)	12	PW
0405LS	LDPAK(S)-(1)	11	PW
0602AB	TO-220AB	10	PW
0602LD	LDPAK(L)	11	PW
0602LM	LDPAK(S)-(2)	12	PW
0602LS	LDPAK(S)-(1)	11	PW
0603DL	DPAK(L)-(2)	10	PW
0603DS	DPAK(S)	10	PW
0607DL	DPAK(L)-(2)	10	PW
0607DS	DPAK(S)	10	PW
0608AB	TO-220AB	10	PW
0608FM	TO-220FM	11	PW
0608LD	LDPAK(L)	11	PW
0608LM	LDPAK(S)-(2)	12	PW
0608LS	LDPAK(S)-(1)	11	PW
1002LD	LDPAK(L)	11	PW
1002LM	LDPAK(S)-(2)	12	PW
1002LS	LDPAK(S)-(1)	11	PW
1004AB	TO-220AB	11	PW
1004DL	DPAK(L)-(2)	10	PW
1004DS	DPAK(S)	10	PW
1004FM	TO-220FM	11	PW
1004LD	LDPAK(L)	11	PW

■H7N Series

Part No.	Package	Page	Contact
1004LM	LDPAK(S)-(2)	12	PW
1004LS	LDPAK(S)-(1)	12	PW
1005DL	DPAK(L)-(2)	10	PW
1005DS	DPAK(S)	10	PW
1005FM	TO-220FM	11	PW
1005LD	LDPAK(L)	11	PW
1005LM	LDPAK(S)-(2)	12	PW
1005LS	LDPAK(S)-(1)	12	PW
1009MD	TO-92MOD	10	PW

■H7P Series

Part No.	Package	Page	Contact
0601DL	DPAK(L)-(2)	10	PW
0601DS	DPAK(S)	10	PW
1001MD	TO-92MOD	10	PW
1002DL	DPAK(L)-(2)	10	PW
1002DS	DPAK(S)	10	PW
1006MD	TO-92MOD	10	PW

■H8N Series

Part No.	Package	Page	Contact
0801AB	TO-220AB	10	PW

■HA Series

Part No.	Package	Page	Contact
31006	WQFN-8	6	HF

■HAF Series

Part No.	Package	Page	Contact
1001	TO-220AB	16	PW
1002(L)	LDPAK(L)	16	PW
1002(S)	LDPAK(S)-(1)	16	PW
1004(L)	DPAK(L)-(1)	16	PW
1004(S)	DPAK(S)	16	PW
1008(L)	LDPAK(L)	16	PW
1008(S)	LDPAK(S)-(1)	16	PW
1009(L)	LDPAK(L)	16	PW
1009(S)	LDPAK(S)-(1)	16	PW
1010RJ	FP-8DA	16	PW
2001	TO-220AB	16	PW
2002	TO-220FM	16	PW
2005	TO-220FM	16	PW
2007(L)	DPAK(L)-(1)	16	PW
2007(S)	DPAK(S)	16	PW
2011(L)	LDPAK(L)	16	PW
2011(S)	LDPAK(S)-(1)	16	PW
2012(L)	LDPAK(L)	16	PW
2012(S)	LDPAK(S)-(1)	16	PW
2014	TO-220AB	16	PW
2015RJ	FP-8DA	16	PW
2017(L)	LDPAK(L)	16	PW
2017(S)	LDPAK(S)-(1)	16	PW
2021(L)	LDPAK(L)	16	PW
2021(S)	LDPAK(S)-(1)	16	PW
2026RJ	FP-8DA	16	PW

■HAT Series

Part No.	Package	Page	Contact
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1020R/RJ	FP-8DA	12/13	PW
1021R	FP-8DA	12	PW
1023R	FP-8DA	12	PW
1024R	FP-8DA	12	PW
1025R	FP-8DA	12	PW
1026R	FP-8DA	12	PW
1035R	FP-8DA	12	PW
1036R	FP-8DA	12	PW
1038R/RJ	FP-8DA	12	PW
1043M	TSOP-6	12	PW
1044M	TSOP-6	12	PW
1047R/RJ	FP-8DA	12	PW
1054R	FP-8DA	12	PW
1055R/RJ	FP-8DA	12	PW
1064R	FP-8DA	15	PW
1065R	FP-8DA	15	PW
1065T	TTP-8DV	15	PW
1069C	CMFPAK-6	12	PW
1089C	CMFPAK-6	12	PW
1090C	CMFPAK-6	12	PW
1091C	CMFPAK-6	12	PW
1093C	CMFPAK-6	12	PW
1094C	CMFPAK-6	12	PW
1095C	CMFPAK-6	12	PW
1096C	CMFPAK-6	12	PW
1097R/RJ	FP-8DA	12	PW
1108C	CMFPAK-6	12	PW
1111C	CMFPAK-6	12	PW
1123R	FP-8DA	13	PW
1125H	LFPAK	16	PW
1126R/RJ	FP-8DA	12	PW
1127H	LFPAK	13	PW
1128R	FP-8DA	16	PW
1129R	FP-8DA	16	PW
1130R	FP-8DA	16	PW
1131R	FP-8DA	16	PW
1132R	FP-8DA	16	PW
1139H	LFPAK	13	PW
1141C	CMFPAK-6	12	PW
1146C	CMFPAK-6	12	PW
1147C	CMFPAK-6	12	PW
2016R	FP-8DA	12	PW
2019R	FP-8DA	13	PW
2020R	FP-8DA	12	PW
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2024R	FP-8DA	12	PW
2025R	FP-8DA	12	PW
2026R	FP-8DA	12	PW
2027R	FP-8DA	12	PW
2028R/RJ	FP-8DA	12	PW
2029R	FP-8DA	12	PW
2033R/RJ	FP-8DA	12	PW
2035R	FP-8DA	12	PW
2036R	FP-8DA	12	PW
2038R/RJ	FP-8DA	12	PW
2040R	FP-8DA	12	PW
2043R	FP-8DA	12	PW
2044R	FP-8DA	12	PW
2050T	TTP-8DV	13	PW
2051T	TTP-8DV	13	PW
2053M	TSOP-6	12	PW
2054M	TSOP-6	12	PW
2057RA	FP-8DA	12	PW
2058R	FP-8DA	12	PW
2064R	FP-8DA	12	PW
2068R	FP-8DA	12	PW

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■HAT Series

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2071R	FP-8DA	12	PW
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2080R	FP-8DA	15	PW
2080T	TTP-8DV	15	PW
2085R	FP-8DA	15	PW
2085T	TTP-8DV	15	PW
2087R	FP-8DA	15	PW
2088R	FP-8DA	15	PW
2089R	FP-8DA	15	PW
2090R	FP-8DA	14	PW
2092R	FP-8DA	12	PW
2093R	FP-8DA	12	PW
2096H	LFPAK	13	PW
2099H	LFPAK	13	PW
2103R	FP-8DA	12	PW
2105R	FP-8DA	15	PW
2105T	TTP-8DV	15	PW
2108R	FP-8DA	12	PW
2114R/RJ	FP-8DA	12	PW
2116H	LFPAK	13	PW
2118R	FP-8DA	12	PW
2119H	LFPAK	15	PW
2129H	LFPAK	13	PW
2131R	FP-8DA	15	PW
2132H	LFPAK	15	PW
2134H	LFPAK	13	PW
2137H	LFPAK	13	PW
2139H	LFPAK	13	PW
2140H	LFPAK	13	PW
2141H	LFPAK	13	PW
2142H	LFPAK	13	PW
2143H	LFPAK	13	PW
2160H	LFPAK	13	PW
2160N	LFPAK-I	13	PW
2164H	LFPAK	13	PW
2164N	LFPAK-I	13	PW
2165H	LFPAK	13	PW
2165N	LFPAK-I	13	PW
2166H	LFPAK	13	PW
2166N	LFPAK-I	13	PW
2167H	LFPAK	13	PW
2167N	LFPAK-I	13	PW
2168H	LFPAK	13	PW
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2170H	LFPAK	13	PW
2170N	LFPAK-I	13	PW
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2172N	LFPAK-I	13	PW
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2196C	CMFPAK-6	12	PW
2197R	FP-8DA	12	PW
2197WP	WPAK	13	PW
2198R	FP-8DA	12	PW
2198WP	WPAK	13	PW
2199R	FP-8DA	12	PW
2199WP	WPAK	13	PW
2200R	FP-8DA	12	PW
2200WP	WPAK	13	PW
2201R	FP-8DA	12	PW
2201WP	WPAK	13	PW
2202C	CMFPAK-6	12	PW
2203C	CMFPAK-6	12	PW
2204C	CMFPAK-6	12	PW
2205C	CMFPAK-6	12	PW
2206C	CMFPAK-6	12	PW
2207C	CMFPAK-6	12	PW
2208R	FP-8DA	12	PW
2209R	FP-8DA	12	PW
2210R	FP-8DA	12	PW
2211RP	FP-11DTV	13	PW

Note) **: To be discontinued package

■HAT Series

Part No.	Package	Page	Contact
2215R	FP-8DA	12	PW
2217C	CMFPAK-6	12	PW
2218R	FP-8DA	13	PW
2219R	FP-8DA	13	PW
2220R	FP-8DA	15	PW
2221C	CMFPAK-6	12	PW
2226R	FP-8DA	15	PW
2240C	CMFPAK-6	12	PW
2244WP	WPAK	13	PW
2256R	FP-8DA	13	PW
2266H	LFPAK	13	PW
2267H	LFPAK	13	PW
2268C	CMFPAK-6	12	PW
2270H	LFPAK	13	PW
2270N	LFPAK-I	13	PW
2275R	FP-8DA	13	PW
2276R	FP-8DA	13	PW
2279H	LFPAK	13	PW
2279N	LFPAK-I	13	PW
2280R	FP-8DA	13	PW
2281C	CMFPAK-6	12	PW
2282C	CMFPAK-6	12	PW
2283H	LFPAK	13	PW
2283N	LFPAK-I	13	PW
2284H	LFPAK	13	PW
2284N	LFPAK-I	13	PW
2285WP	WPAK	13	PW
2286C	CMFPAK-6	12	PW
2287WP	WPAK	15	PW
2291C	CMFPAK-6	12	PW
2292C	CMFPAK-6	12	PW
2299WP	WPAK	15	PW
3004R	FP-8DA	13	PW
3005R	FP-8DA	12	PW
3006R	FP-8DA	13	PW
3008R/RJ	FP-8DA	13	PW
3010R	FP-8DA	13	PW
3015R	FP-8DA	15	PW
3015T	TTP-8DV	15	PW
3018R/RJ	FP-8DA	13	PW
3019R	FP-8DA	12	PW
3021R	FP-8DA	13	PW
3029R	FP-8DA	13	PW
3031R	FP-8DA	13	PW
3032R	FP-8DA	13	PW
3037R	FP-8DA	13	PW
3038R	FP-8DA	13	PW
3040R	FP-8DA	13	PW
3042C	CMFPAK-6	12	PW
3043C	CMFPAK-6	12	PW

■HSG Series

Part No.	Package	Page	Contact
1001	CMPAK-4	6	HF
1002	MFPAK-4	6	HF
1003	CMPAK-4	6	HF
2001	CMPAK-4	6	HF

■POL-SiP Series

Part No.	Package	Page	Contact
R2J20701NP	QFN56	16	PW

■RJE Series

Part No.	Package	Page	Contact
0601JPE	LDPAK(S)-(1)	16	PW

■RJH Series

Part No.	Package	Page	Contact
3047DPK	TO-3P (Co-pack)	17	PW
3077DPK	TO-3P (Co-pack)	17	PW

■RJK Series

Part No.	Package	Page	Contact
0202DSP	FP-8DA	13	PW
0301DPB	LFPAK	13	PW
0301DPC	LFPAK-i	13	PW
0302DPB	LFPAK	13	PW
0302DPC	LFPAK-i	13	PW
0303DPB	LFPAK	13	PW
0303DPC	LFPAK-i	13	PW
0304DPB	LFPAK	13	PW
0304DPC	LFPAK-i	13	PW
0305DPB	LFPAK	13	PW
0305DPC	LFPAK-i	13	PW
0316DSP	FP-8DA	13	PW
0317DSP	FP-8DA	13	PW
0328DPB	LFPAK	13	PW
0329DPB	LFPAK	13	PW
0330DPB	LFPAK	13	PW
0331DPB	LFPAK	13	PW
0332DPB	LFPAK	13	PW
0346DPA	WPAK	13	PW
0348DPA	WPAK	13	PW
0348DSP	FP-8DA	13	PW
0349DPA	WPAK	13	PW
0349DSP	FP-8DA	13	PW

■RJK Series

Part No.	Package	Page	Contact
0351DPA	WPAK	13	PW
0352DSP	FP-8DA	13	PW
0353DPA	WPAK	13	PW
0353DSP	FP-8DA	13	PW
0354DSP	FP-8DA	13	PW
0355DPA	WPAK	13	PW
0355DSP	FP-8DA	13	PW
0364DPA	WPAK	13	PW
0365DPA	WPAK	13	PW
0366DPA	WPAK	13	PW
0366DSP	FP-8DA	13	PW
0368DPA	WPAK	13	PW
0369DPA	WPAK	13	PW
0369DSP	FP-8DA	13	PW
0371DSP	FP-8DA	13	PW
1021DPE	LDPAK(S)-(1)	12	PW
1021DPN	TO-220AB	11	PW
1525DPE	LDPAK(S)-(1)	12	PW
1525DPF	LDPAK(S)-(2)	12	PW
1525DPJ	LDPAK(L)	11	PW
1525DPS	TO-220CFM	11	PW
1526DPE	LDPAK(S)-(1)	12	PW
1526DPF	LDPAK(S)-(2)	12	PW
1526DPJ	LDPAK(L)	11	PW
1529DPK	TO-3P	12	PW
1535DPE	LDPAK(S)-(1)	12	PW
1535DPF	LDPAK(S)-(2)	12	PW
1535DPJ	LDPAK(L)	11	PW
1536DPE	LDPAK(S)-(1)	12	PW
1536DPN	TO-220AB	11	PW
2006DPE	LDPAK(S)-(1)	14	PW
2006DPF	LDPAK(S)-(2)	14	PW
2006DPJ	LDPAK(L)	14	PW
2009DPM	TO-3PFM	15	PW
2508DPK	TO-3P	14	PW
2511DPK	TO-3P	14	PW
3008DPK	TO-3P	15	PW
4007DPP	TO-220FN	14	PW
4012DPE	LDPAK(S)-(1)	14	PW
4013DPE	LDPAK(S)-(1)	14	PW
4014DPK	TO-3P	14	PW
4015DPK	TO-3P	15	PW
4018DPK	TO-3P	14	PW
4512DPE	LDPAK(S)-(1)	14	PW
4513DPE	LDPAK(S)-(1)	14	PW
4514DPK	TO-3P	14	PW
4515DPK	TO-3P	15	PW
4518DPK	TO-3P	14	PW
5003DPD	MP-3A	14	PW
5012DPE	LDPAK(S)-(1)	14	PW
5012DPP	TO-220FN	14	PW
5013DPE	LDPAK(S)-(1)	14	PW
5013DPK	TO-3P	15	PW
5013DPP	TO-220FN	14	PW
5014DPK	TO-3P	15	PW
5014DPP	TO-220FN	14	PW
5015DPK	TO-3P	15	PW
5018DPK	TO-3P	15	PW
5020DPK	TO-3P	15	PW
5026DPP	TO-220FN	14	PW
6002DPD	MP-3A	14	PW
6011DJE	TO-92MOD	14	PW
6012DPE	LDPAK(S)-(1)	14	PW
6012DPP	TO-220FN	14	PW
6013DPE	LDPAK(S)-(1)	14	PW
6013DPP	TO-220FN	14	PW
6014DPK	TO-3P	15	PW
6014DPP	TO-220FN	14	PW
6015DPK	TO-3P	15	PW
6018DPK	TO-3P	15	PW
6020DPK	TO-3P	15	PW
6022DJE	TO-92MOD	10	PW
6026DPE	LDPAK(S)-(1)	14	PW

■RJP Series

Part No.	Package	Page	Contact
2557DPK	TO-3P	17	PW
3042DPP	TO-220FN	17	PW
3043DPK	TO-3P	17	PW
3046DPP	TO-220FN	17	PW
3047DPK	TO-3P	17	PW
3049	TO-3P	17	PW
3053DPP	TO-220FN	17	PW
3054DPN	TO-220AB	17	PW
3054DPP	TO-220FN	17	PW
3055DPP	TO-220FN	17	PW
3056DPK	TO-3P	17	PW
3056DPP	TO-220FN	17	PW
3057DPK	TO-3P	17	PW
3060DPK	TO-3P	17	PW
3063DPP	TO-220FN	17	PW
3063DPP-C0	TO-220CFM	17	PW
3064DPN	TO-220AB	17	PW
3064DPP	TO-220FN	17	PW
3065DPN	TO-220AB	17	PW
3065DPP	TO-220FN	17	PW
3066DPK	TO-3P	17	PW
3067DPK	TO-3P	17	PW
3069	TO-3P	17	PW
4002ANS	VSON-8	17	PW
4002ASA	TTP-8DV	17	PW
4003ANS	VSON-8	17	PW
4003ASA	TTP-8DV	17	PW
4065DPP	TO-220FN	17	PW
4065DPP-C0	TO-220CFM	17	PW
4067DPK	TO-3P	17	PW
6003DPE	LDPAK(S)	17	PW
6045DPP	TO-220FN	17	PW
6047DPP	TO-220FN	17	PW
6055DPP	TO-220FN	17	PW
6065DPN	TO-220AB	17	PW
6065DPP	TO-220FN	17	PW

■RQA Series

Part No.	Package	Page	Contact
0001	WSON0303-2	6	HF
0002	WSON0504-2	6	HF
0003	WSON0303-2	6	HF
0004	UPAK	6	HF
0005	UPAK	6	HF
0008	UPAK	6	HF
0009	UPAK	6	HF

■RQG Series

Part No.	Package	Page	Contact
1001	CMPAK-4	6	HF
1003	CMPAK-4	6	HF
2001	CMPAK-4	6	HF

■RQJ Series

Part No.	Package	Page	Contact
0201UGDQA	MPAK	10	HF
0202VGDQA	MPAK	10	HF
0203WGDQA	MPAK	10	HF
0204XGDQA	MPAK	10	HF
0301HGDQS	UPAK	10	HF
0302NGDQA	MPAK	10	HF
0303PGDQA	MPAK	10	HF
0601DGDQS	UPAK	10	HF
0602EGDQA	MPAK	10	HF
0602EGDQS	UPAK	10	HF
0603LGDQA	MPAK	10	HF

■RQK Series

Part No.	Package	Page	Contact
0201QGDQA	MPAK	10	HF
0202RGDQA	MPAK	10	HF
0203SGDQA	MPAK	10	HF
0204TGDQA	MPAK	10	HF
0301FGDQS	UPAK	10	HF
0302GGDQA	MPAK	10	HF
0302GGDQS	UPAK	10	HF
0303MGDQA	MPAK	10	HF
0601AGDQS	UPAK	10	HF
0603CGDQA	MPAK	10	HF
0603CGDQS	UPAK	10	HF
0604IGDQA	MPAK	10	HF
0605JGDQA	MPAK	10	HF
0606KGDQA	MPAK	10	HF

■RQL Series

Part No.	Package	Page	Contact
1001	CMPAK-6	6	HF

■RQM Series

Part No.	Package	Page	Contact
2201DNS	WSON0303-6	10	HF

■TBB Series

Part No.	Package	Page	Contact
1002	CMPAK-6	7	HF
1004	CMPAK-6	7	HF
1005	CMPAK-6	7	HF
1010	CMPAK-6	7	HF
1012	CMPAK-6	7	HF
1016	CMPAK-6	7	HF

< Overseas Sales Only >

■H Series

Part No.	Package	Page	Contact
945	TO-92(1)	9	RSM
8050	TO-92(1)	9	RSM
8550	TO-92(1)	9	RSM

■HIT Series

Part No.	Package	Page	Contact
468	TO-92MOD	9	RSM
562	TO-92MOD	9	RSM
647	TO-92MOD	9	RSM
667	TO-92MOD	9	RSM
5609	TO-92MOD	9	RSM
5610	TO-92MOD	9	RSM
8050	TO-92(1)	9	RSM
8550	TO-92(1)	9	RSM

< Contact >

Symbol	Contact
HF: High Frequency	Analog Product Marketing Dept.2 Standard Product Business Unit Renesas Technology Corp. For high frequency transistors(small signal transistors) URL: http://japan.renesas.com/tech_inquiry
PW: Power	Analog Product Marketing Dept.2 Standard Product Business Unit Renesas Technology Corp. For power MOS FET, IGBT, triacs, thyristors URL: http://japan.renesas.com/tech_inquiry
RSM	RSM Design Center RENESAS Semiconductor (Malaysia) Sdn. Bhd. TEL: <60>(4) 643-8121

SiGe HBT, MMIC

■ High Frequency Amplification (SiGe HBT)

Package	Part No.	Ratings		Characteristics				Status
		V_{CEO}	I_C	f_T (GHz)	NF (dB)		Cob	
		(V)	(A)	typ	typ	f (GHz)	(pF) max	
CMPAK-4	RQG1001	3.5	35 m	35	1.3	5.8	0.17 typ	O♦B
	HSG1001	3.5	35 m	35	1.3	5.8	0.17 typ	O♦B
	RQG1003	3.5	35 m	36	1.2	5.8	0.24 typ	O♦B
	HSG1003	3.5	35 m	36	1.2	5.8	0.24 typ	O♦B
	RQG2001	5	100 m	18	0.9	1.8	1.2	O♦B
	HSG2001	5	100 m	18	0.9	1.8	1.2	O♦B
MFPAK-4	HSG1002	3.5	35 m	38	1.2	5.8	0.22 typ	O♦B

■ High Frequency Amplification (SiGe MMIC)

Package	Part No.	Ratings		Characteristics				Status
		V_{CC}	I_{CC}	Gain	NF	I_C (op)		
		(V)	(A)	(dB)	(dB)	(A)	f (GHz)	
WQFN-8	HA31006	4	20 m	16	1.7	10 m	5.8	O♦B
CMPAK-6	RQL1001	4	20 m	16.5	2.1	10 m	5.8	O♦B

High Frequency Power MOS FET

■ High Frequency Power Amplification

Package	Part No.	Ratings		Characteristics				Status
		V_{DSS}	I_D	Pout (dBm) typ				
		(V)	(A)		f (MHz)	Pin (dBm)	V_{DD} (V)	
UPAK	2SK2596	17	0.4	31.5	836.5	18	12	O♦
	2SK3391	17	0.3	33	836	14	13.7	Δ♦
	RQA0004	16	0.3	29.7	520	13	6	O♦A
	RQA0005	16	0.8	33	520	20	6	O♦A
	RQA0008	16	2.4	36	520	20	6	O♦A
	RQA0009	16	3.2	37.8	520	25	6	O♦A
RP8P	2SK2595	17	1.1	38.4	836.5	29.5	12	O♦
	2SK3390	17	1	38.7	836	21	13.7	O♦
WSON 0303-2	RQA0001	16	0.8	33	520	20	6.0	O♦A
	RQA0003	16	2.4	36	520	20	6.0	O♦A
WSON 0504-2	RQA0002	16	3.8	39.6	520	25	7.5	O♦A

Notes) O: In Mass Production
SPL: Samples are available
Δ: Long delivery date(Lead time: 3 months)
A: Promoted
B: Not recommend for new design
♦: Large order only (Unit: Refer to packing unit (P.19))
OS: Overseas sales only

High Frequency MOS FET, BBFET

■ High Frequency Amplification (Twin BBFET)

Package	Part No.	Ratings		Characteristics (FET-1)				Characteristics (FET-2)				Status
		V_{DS} (V)	I_D (A)	Ciss (pF) typ	lyfsl (mS) typ	NF (dB) typ	f (GHz)	Ciss (pF) typ	lyfsl (mS) typ	NF (dB) typ	f (GHz)	
CMPAK-6	TBB1002	6	30 m	1.8	26	1.7	0.9	2.6	25	1.2	0.2	O♦
	TBB1004	6	30 m	1.8	26	1.7	0.9	2.7	32	1.2	0.2	Δ♦
	TBB1005	6	30 m	1.8	26	1.7	0.9	2.6	25	1.2	0.2	Δ♦
	TBB1010	6	30 m	2.1	29	1.1	0.2	2.1	29	1.1	0.2	O♦
	TBB1012	6	30 m	1.6	32	1.95	0.9	2.7	30	0.95	0.2	O♦
	TBB1016	6	30 m	2.2	35	1	0.2	2.2	35	1	0.2	O♦

■ High Frequency Amplification (Small Signal MOS FET)

Package	Part No.	Ratings		Characteristics				Status
		V_{DS} (V)	I_D (A)	Ciss (pF) typ	PG(dB) typ	NF (dB) typ	f (GHz)	
CMPAK	2SK1215	20	30 m	2.5	30	2.0	0.1	Δ♦B
CMPAK-4	3SK318	6	20 m	1.6	21	1.4	0.9	O♦
	3SK324	6	20 m	1.2	24	0.9	0.9	Δ♦B
	BB501C	6	20 m	1.7	21.5	1.8	0.9	Δ♦B
	BB502C	6	20 m	1.7	22	1.6	0.9	O♦
	BB503C	6	20 m	1.7	22	1.8	0.9	Δ♦
	BB505C	6	30 m	1.75	24	1.5	0.9	Δ♦
	BB301C	6	25 m	3.0	26	1.3	0.2	Δ♦
	BB504C	6	30 m	2.1	22	1.75	0.9	O♦
	BB506C	6	30 m	1.5	24	1.3	0.9	O♦
	3SK296	12	25 m	1.5	19.5	2.0	0.9	Δ♦
	3SK298	12	25 m	2.9	25	1.0	0.2	Δ♦B
	BB304C	12	25 m	2.8	29	1.2	0.2	Δ♦B
	BB305C	12	25 m	2.8	28	1.3	0.2	Δ♦
	3SK317	14	25 m	3.1	27.6	1.0	0.2	O♦

Package	Part No.	Ratings		Characteristics				Status
		V_{DS} (V)	I_D (A)	Ciss (pF) typ	PG(dB) typ	NF (dB) typ	f (GHz)	
MPAK	2SK360	20	30 m	2.5	30	2.0	0.1	O♦
MPAK-4	3SK319	6	20 m	1.6	21	1.4	0.9	Δ♦
	3SK323	6	20 m	1.2	24	0.9	0.9	Δ♦B
	BB502M	6	20 m	1.7	22	1.6	0.9	O♦
	BB503M	6	20 m	1.7	22	1.8	0.9	Δ♦B
	BB505M	6	30 m	1.75	24	1.5	0.9	Δ♦B
	BB301M	6	25 m	3.0	26	1.3	0.2	Δ♦
	BB504M	6	30 m	2.1	22	1.75	0.9	O♦
	3SK295	12	25 m	1.5	19.5	2.0	0.9	Δ♦B
	3SK297	12	25 m	2.9	25	1.0	0.2	O♦
	BB302M	12	25 m	3.0	26	1.7	0.2	Δ♦B
	BB305M	12	25 m	2.8	28	1.4	0.2	O♦
	3SK300	14	25 m	3.1	27.6	1.0	0.2	Δ♦B

High Frequency Transistors

■ High Frequency Amplification

Package	Part No.	Ratings		Characteristics				Status
		V_{CEO} (V)	I_C (A)	f_T (GHz) typ	NF (dB) typ	NF (dB) f (GHz)	Cob (pF) max	
TO-92(2)	2SC1906	19	50 m	1.0	—	—	2.0	Δ♦B
	2SC1907	19	50 m	1.1	—	—	2.0	Δ♦B
MFPAK (1408)	2SC5700	4	50 m	12	1.0	0.9	0.7	Δ♦B
	2SC5543	8	20 m	8.5	1.1	0.9	0.9	Δ♦B
	2SC5555	8	50 m	9	1.1	0.9	0.85	Δ♦B
CMPAK	2SC4965	8.0	100 m	—	—	—	1.6	Δ♦
	2SC4901	9.0	50 m	9.0	1.2	0.9	1.4	O♦
	2SC4264	11	50 m	3.5	–	–	1.5	Δ♦
	2SC4537	11	50 m	6.0	1.6	0.9	1.5	Δ♦B
	2SC4260	13	50 m	3.8	—	—	1.3	Δ♦
	2SC4261	15	50 m	2.4	—	—	1.0	Δ♦
	2SC4265	20	50 m	1.2	—	—	1.5	Δ♦
CMPAK-4	2SC5624	3.5	35 m	28	1.2	1.8	0.6	Δ♦B
	2SC5820	4	35 m	20	1.2	1.8	0.6	Δ♦
	2SC5594	4.5	35 m	24	1.2	1.8	0.6	O♦
	2SC5081	8.0	50 m	13.5	1.1	0.9	0.75	Δ♦B
MPAK	2SC5773	6	80 m	10.8	1.1	0.9	1.8	Δ♦
	2SC5772	9	75 m	9	1.1	0.9	1.5	O♦
	2SC2734	11	50 m	3.5	—	—	1.5	O♦
	2SC3127	12	50 m	4.5	2.2	0.9	1.5	Δ♦B
	2SC5890	12	75 m	7.8	1.0	0.9	1.5	O♦
	2SC4197	13	50 m	3.8	—	—	1.3	Δ♦B
	2SC2620	20	20 m	0.94	—	—	1.2	O♦
	2SC2735	20	50 m	1.2	—	—	1.5	O♦
MPAK-4	2SC5545	6.0	50 m	13	1.1	0.9	1.1	Δ♦B
	2SC4926	8.0	50 m	11	1.1	0.9	1.1	O♦
UPAK	2SC5631	6.0	80 m	11	1.2	0.9	2.2	O♦
	2SC4988	9.0	100 m	8.5	1.3	0.9	1.6	Δ♦
	2SC4807	15	200 m	4.4	2.5	0.9	4.0	Δ♦B

■ High Frequency Power Amplification

Package	Part No.	Ratings		Characteristics				Status
		V_{CEO} (V)	I_C (A)	Pout (dBm) typ	f (GHz)	Pin (dBm)	Vcc (V)	
MPAK	2SC5998	5	500 m	29	0.5	16	3.6	O♦
TNP-6DTV	2SC5945	5	500 m	27	2.4	20	3.3	O♦

Notes) O: In Mass Production
SPL: Samples are available
Δ: Long delivery date(Lead time: 3 months)
A: Promoted
B: Not recommend for new design
♦: Large order only (Unit: Refer to packing unit (P.19))
OS: Overseas sales only

Small Signal Transistors

■ General Amplification (JFET)

Package	Part No.	Ratings VDS (VDSX) (V)	Ratings VGSS (VGSO) (V)	Ratings ID (IG) (A)	Characteristics |yfs| (mS) min	Characteristics IDSS (mA)	Status
TO-92(2)	2SK435	22	—	0.1	20	6 - 40	Δ♦
MPAK	2SK1070	—	(–22)	50 m	20	6 - 40	O♦

■ μ-FET Series (Small Signal Switching)

Package	Part No.	VDSS (V)	ID (A)	RDS(on) (Ω) VGS = 10V typ	RDS(on) (Ω) VGS = 10V max	RDS(on) (Ω) VGS = 4V typ	RDS(on) (Ω) VGS = 4V max	RDS(on) (Ω) VGS = 2.5V typ	RDS(on) (Ω) VGS = 2.5V max	Ciss (pF)	Status
MPAK	2SJ574	-30	-0.3	1.1	1.3	2.2	3.1	—	—	50	O♦
	2SK3288	30	0.1	2.7	3.5	4.7	7.0	—	—	3	Δ♦B
	2SK3287	30	0.3	1.26	1.44	2.8	3.44	—	—	6	Δ♦B
	2SK3290	30	0.5	0.46	0.525	0.9	1.25	—	—	5	O♦

Package	Part No.	VDSS (V)	ID (A)	RDS(on) (Ω) VGS = 10V typ	RDS(on) (Ω) VGS = 10V max	RDS(on) (Ω) VGS = 4V typ	RDS(on) (Ω) VGS = 4V max	RDS(on) (Ω) VGS = 2.5V typ	RDS(on) (Ω) VGS = 2.5V max	Ciss (pF)	Status
CMPAK	2SJ586	-20	-0.1	—	—	4.1	5.0	6.0	8.5	28	Δ♦B
	2SJ576	-30	-0.1	2.8	3.3	5.7	7.9	—	—	25	Δ♦
	2SK3348	20	0.1	—	—	1.6	1.9	2.2	3.2	18	Δ♦
	2SK3378	30	0.1	2.7	3.5	4.7	7.0	—	—	1.6	Δ♦
	2SK3289	30	0.3	1.26	1.44	2.8	3.44	—	—	6	Δ♦

■ General Amplification (Bip Transistor)

Package	Part No.	Ratings VCEO (V)	Ratings IC (A)	Characteristics hFE	Characteristics VCE(sat) (V) max	Status
UPAK	2SB1001	-16	-2.0	160 - 320	-0.3	Δ♦B
	2SB1002	-50	-1.0	160 - 320	-0.6	O♦
	2SB1025	-80	-1.0	100 - 200	-1.0	O♦
	2SB1026	-100	-1.0	100 - 200	-1.0	O♦
	2SB1028	-160	-1.5	100 - 200	-1.0	Δ♦B
	2SD1974	25	0.8	250 - 1200	0.4	O♦B
	2SD1368	50	1.0	160 - 500	0.3	O♦
	2SD1418	80	1.0	60 - 200	1.0	O♦
	2SD1419	100	1.0	100 - 200	1.0	Δ♦
	2SD1421	160	1.5	60 - 120	1.0	Δ♦B
	2SC3380	300	0.1	30 - 200	1.5	O♦
MPAK	2SB831	-20	-0.7	120 - 240	-0.5	Δ♦B
	2SA1052	-30	-0.1	160 - 500	-0.2	Δ♦B
	2SA1121	-35	-0.5	100 - 320	-0.6	O♦
	2SB1691	-50	-1	200 - 500	-0.3	O♦
	2SA1122	-55	-0.1	160 - 500	-0.5	Δ♦B
	2SA1566	-120	-0.1	250 - 800	-0.15	Δ♦B
	2SD1306	15	0.7	250 - 800	0.5	O♦
	2SC2618	35	0.5	100 - 320	0.6	O♦
	2SC2462	40	0.1	100 - 500	0.2	O♦B
	2SC2463	50	0.1	400 - 800	0.5	Δ♦B
	2SD2655	50	1	200 - 500	0.3	O♦
	2SC4050	120	0.1	250 - 800	0.1	Δ♦
	2SC4702	300	50 m	60 - 150	0.5	O♦
CMPAK	2SC5850	40	100 m	160 - 320	0.2	Δ♦B

Package	Part No.	Ratings VCEO (V)	Ratings IC (A)	Characteristics hFE	Characteristics VCE(sat) (V) max	Status
TO-92(1)	2SA673	-35	-0.5	60 - 320	-0.6	Δ♦B
	2SA673A	-50	-0.5	60 - 320	-0.6	O♦B
	2SA1084	-90	-0.1	400 - 800	-0.2	O♦
	2SA1188	-90	-0.1	400 - 800	-0.15	Δ♦B
	2SA1190	-90	-0.1	250 - 800	-0.15	Δ♦B
	2SA1085	-120	-0.1	400 - 800	-0.2	Δ♦
	2SD655	15	0.7	250 - 1200	0.5	Δ♦
	2SD467	20	0.7	85 - 240	0.5	Δ♦
	2SC1213	35	0.5	100 - 320	0.6	Δ♦B
	2SC1213A	50	0.5	60 - 320	0.6	O♦B
	2SC1214	50	0.5	100 - 320	0.6	Δ♦B
	2SC2545	60	0.1	400 - 1200	0.2	Δ♦B
	2SC2546	90	0.1	600 - 1200	0.2	Δ♦B
	2SC2853	90	0.1	400 - 800	0.1	Δ♦B
	2SC2547	120	0.1	400 - 800	0.2	Δ♦B
TO-92 MOD	2SB562	-20	-1.0	120 - 240	-0.5	O♦B
	2SD468	20	1.0	120 - 240	0.5	O♦B
	2SD789	50	1.0	160 - 800	0.3	O♦B
	2SD974	60	1.0	150 -	0.3	Δ♦B
	2SD667	80	1.0	100 - 320	1.0	O♦B
	2SD667A	100	1.0	60 - 200	1.0	O♦B
	2SC2610	300	0.1	30 - 200	1.5	Δ♦B

■ General Switching (Darlington Transistors)

Package	Part No.	Ratings VCEO (V)	Ratings IC (A)	Characteristics hFE	Characteristics toff (μs) typ	Status
TO-92(1)	2SC1472(K)	30	0.3	2 k - 100 k	0.8	Δ♦B
TO-92 MOD	2SD1209(K)	60	1.0	4 k -	—	Δ♦B

Package	Part No.	Ratings VCEO (V)	Ratings IC (A)	Characteristics hFE	Characteristics toff (μs) typ	Status
UPAK	2SD1470	60	1.0	2 k - 100 k	—	Δ♦B
	2SD1472	120	1.5	2 k - 30 k	2.0	Δ♦B

Notes) O: In Mass Production
SPL: Samples are available
Δ: Long delivery date(Lead time: 3 months)
A: Promoted
B: Not recommend for new design
♦: Large order only (Unit: Refer to packing unit (P.19))
OS: Overseas sales only

Overseas Sales Only

Notice: These products are for overseas sales only.

Please contact: RSM Design Center
RENESAS Semiconductor (Malaysia) Sdn. Bhd.
TEL: <60>(4) 643-8121

■ General Amplification (Small Signal Transistors)

Package	Part No.	Ratings		Characteristics		Status
		V_{CEO} (V)	I_C (A)	hFE	V_{CE}(sat) (V) max	
TO-92(1)	H8550	-20	-0.7	60 to 240	-0.5	Δ♦ CBT
	HIT8550	-20	-0.7	60 to 240	-0.5	O♦
	H8050	20	0.7	20 to 240	0.5	Δ♦ CBT
	HIT8050	20	0.7	20 to 240	0.5	O♦
	H945	50	0.2	135 to 600	0.25	O♦

Package	Part No.	Ratings		Characteristics		Status
		V_{CEO} (V)	I_C (A)	hFE	V_{CE}(sat) (V) max	
TO-92 MOD	HIT5610	-20	-1.0	60 to 240	-0.5	Δ♦
	HIT5609	20	1.0	60 to 240	0.5	Δ♦
	HIT647	-120	-1.0	140 to 350	-0.5	O♦
	HIT667	120	1.0	140 to 330	0.5	O♦
	HIT562	-45	-1.0	85 to 330	-0.5	O♦
	HIT468	45	1.0	85 to 330	0.5	O♦

Notes) O: In Mass Production
SPL: Samples are available
Δ: Long delivery date(Lead time: 3 months)
A: Promoted
B: Not recommend for new design
♦: Large order only (Unit: Refer to packing unit (P.19))

Power MOS FET

■ General Switching(Low Voltage Power)

Package	Part No.	Ratings VDSS (V)	Ratings ID (A)	Characteristics RDS(on) (Ω) max. 10 V	4 V	2.5 V	Ciss (pF) typ	Status
TO-92(1)	2SK1336	60	0.3	1.7	2.5	-	33	O♦
	2SK1337	100	0.3	4.5	6.5	-	35	Δ♦
	2SK4151	150	1	-	1.95	2.5	98	O♦A
TO-92 MOD	H7P1001MD	-100	-1.1	0.8	1.1	-	400	O♦
	2SJ496	-60	-5	0.16	0.24	-	600	O♦
	2SJ386	-30	-3	0.4	0.8	-	177	Δ♦
	2SJ483	-30	-5	0.11	0.17	-	630	Δ♦B
	2SK975	60	1.5	0.4	0.55	-	140	O♦
	2SK2085	100	1	0.9	1.35	-	130	Δ♦B
	H7N1009MD	100	2	0.13	0.18(4.5V)	-	820	O♦
	2SK3446	150	1	-	1.95	2.5	95	O♦A
	2SK3447	150	1	1.95	2.5	-	85	O♦A
	RJK6022DJE	600	0.2	15	-	-	84	O♦A
	H7P1006MD	-100	-1.8	0.18	-	-	2350	O♦
MPAK	RQJ0602EGDQA	-60	-1.1	0.613	-	-	145	O♦A
	RQJ0603LGDQA	-60	-1.8	0.198	-	-	440	O♦A
	2SJ399	-30	-0.2	3	5	-	1.1	Δ♦
	2SJ486	-30	-0.3	-	0.65	1.2	45	Δ♦
	RQJ0302NGDQA	-30	-2.2	0.173	-	-	195	O♦A
	RQJ0303PGDQA	-30	-3.3	0.068	-	-	625	O♦A
	2SJ451	-20	-0.2	-	3.5	9	2.4	Δ♦
	RQJ0201UGDQA	-20	-3.5	-	-	0.105	600	O♦A
	RQJ0202VGDQA	-20	-2.7	-	-	0.17	350	O♦A
	RQJ0203WGDQA	-20	-2.1	-	-	0.3	200	O♦A
	RQJ0204XGDQA	-20	-1.6	-	-	0.51	150	O♦A
	2SK2570	20	0.2	-	1.1	2.2	45	Δ♦B
	RQK0201QGDQA	20	4.7	-	-	0.055	500	O♦A
	RQK0202RGDQA	20	2.7	-	0.055(4.5V)	0.085	350	O♦A
	RQK0203SGDQA	20	2.9	-	0.090(4.5V)	0.15	160	O♦A
	RQK0204TGDQA	20	2.3	-	-	0.21	140	O♦A
	2SK2373	30	0.2	1.4	2.5	-	17.8	Δ♦
	2SK2980	30	1	-	0.28	0.5	155	Δ♦
	RQK0302GGDQA	30	2.7	0.115	-	-	175	O♦A
	RQK0303MGDQA	30	3.7	0.053	-	-	550	O♦A
	2SK3000	40	1	0.3	0.5	-	14	O♦
	2SK2569	50	0.2	-	2.6	5	14	Δ♦
	RQK0603CGDQA	60	2	0.265	-	-	130	O♦A
	RQK0604IGDQA	60	2	-	0.144	0.18	320	O♦A
	RQK0605JGDQA	60	3.1	0.103	-	-	405	O♦A
	RQK0606KGDQA	60	1.5	-	0.225	0.29	200	O♦A
UPAK	2SJ278	-60	-1	0.83	1.2	-	160	O♦
	2SJ518	-60	-2	0.46	0.63	-	220	O♦
	RQJ0601DGDQS	-60	-2.8	0.155	-	-	590	O♦A
	RQJ0602EGDQS	-60	-1.5	0.607	-	-	135	O♦A
	2SJ484	-30	-2	0.23	0.45	-	230	O♦
	RQJ0301HGDQS	-30	-5.2	0.048	-	-	845	O♦A
	2SJ517	-20	-2	-	0.24	0.43	320	O♦
	2SJ244	-12	-2	-	-	0.9	130	Δ♦
	2SJ317	-12	-2	-	0.35	0.7(-2.2V)	63	O♦
	2SK1579	12	2	0.7(2.2V)	0.35	0.7(2.2V)	110	Δ♦
	2SK2978	20	2.5	-	0.12	0.2	260	Δ♦
	2SK1772	30	1	0.6	0.85	-	85	O♦
	RQK0301FGDQS	30	6	0.035	-	-	750	O♦A
	RQK0302GGDQS	30	3.8	0.102	-	-	170	O♦A
	2SK1697	60	0.5	1.7	2.5	-	33	Δ♦
	2SK1764	60	2	0.45	0.6	-	140	O♦
	2SK2788	60	2	0.16	0.25	-	180	O♦
	RQK0601AGDQS	60	5	0.07	-	-	540	O♦A
	RQK0603CGDQS	60	2.8	0.257	-	-	130	O♦A
WSON 0303-6	RQM2201DNS	60	2	-	0.225(4.5V)	0.29	200	O♦A
DPAK (L)-(1)	2SJ527L	-60	-5	0.4	0.8	-	220	O
	2SK2796L	60	5	0.16	0.25	-	180	O
	2SK1254L	120	3	0.4	0.55	-	420	O
	2SK1299L	100	3	0.35	0.45	-	400	O
DPAK (L)-(2)	H7P1002DL	-100	-15	0.105	0.15	-	2600	O
	2SJ528L	-60	-7	0.22	0.37	-	400	O
	2SJ529L	-60	-10	0.16	0.24	-	580	O
	2SJ530L	-60	-15	0.1	0.16	-	850	O
	H7P0601DL	-60	-20	0.05	0.085(4.5V)	-	2200	O
	2SJ506L	-30	-10	0.085	0.18	-	630	O
	2SJ387L	-20	-10	-	0.07	0.1	1170	O
	2SK2084L	20	7	0.053	0.075	-	800	O
	2SK2329L	30	10	-	0.04	0.06	1250	O
	2SK2735L	30	20	0.028	0.05	-	750	O
	2SK3274L	30	30	0.013	0.03(4.5V)	-	1500	O
	2SK2869L	60	20	0.045	0.07	-	740	O
	2SK2925L	60	10	0.08	0.16	-	350	O
	2SK2926L	60	15	0.055	0.11	-	500	O
	H7N0603DL	60	30	0.015	0.022(4.5V)	-	3200	O

Package	Part No.	Ratings VDSS (V)	Ratings ID (A)	Characteristics RDS(on) (Ω) max. 10 V	4 V	2.5 V	Ciss (pF) typ	Status
DPAK (L)-(2)	H7N0607DL	60	80	0.034	0.056	-	1100	O
	2SK3147L	100	5	0.13	0.18	-	420	O
	H7N1004DL	100	25	0.035	0.045(4.5V)	-	2800	O
	H7N1005DL	100	15	0.11	0.155(4.5V)	-	830	O
DPAK(S)	H7P1002DS	-100	-15	0.105	0.15	-	2600	O
	2SJ527S	-60	-5	0.4	0.8	-	220	O
	2SJ528S	-60	-7	0.22	0.37	-	400	O
	2SJ529S	-60	-10	0.16	0.24	-	580	O
	2SJ530S	-60	-15	0.1	0.16	-	850	O
	H7P0601DS	-60	-20	0.05	0.085(4.5V)	-	2200	O
	2SJ506S	-30	-10	0.085	0.18	-	630	O
	2SJ387S	-20	-10	-	0.07	0.1	1170	O
	2SK2084S	20	7	0.053	0.075	-	800	O
	2SK2329S	30	10	-	0.04	0.06	1250	O
	2SK2735S	30	20	0.028	0.05	-	750	O
	2SK3274S	30	30	0.013	0.03(4.5V)	-	1500	O
	2SK2796S	60	5	0.16	0.25	-	180	O
	2SK2869S	60	20	0.045	0.07	-	740	O
	2SK2925S	60	10	0.08	0.16	-	350	O
	2SK2926S	60	15	0.055	0.11	-	500	O
	H7N0603DS	60	30	0.015	0.022(4.5V)	-	3200	O
	H7N0607DS	60	80	0.034	0.056	-	1100	O
	2SK3147S	100	5	0.13	0.18	-	420	O
	H7N1004DS	100	25	0.035	0.045(4.5V)	-	2800	O
	H7N1005DS	100	15	0.11	0.155(4.5V)	-	830	O
	2SK1254S	120	3	0.4	0.55	-	420	O
	2SK1299S	100	3	0.35	0.45	-	400	O
MP-3A	FX3ASJ-3	-150	-3	1.2	1.32	-	1170	O
	FX6ASJ-3	-150	-6	0.53	0.59	-	2420	O
	FX20ASJ-2	-100	-20	0.26	0.32	-	2360	O
	FX6ASJ-2	-100	-6	0.58	0.72	-	1110	O
	FX20ASJ-06	-60	-20	0.097	0.166	-	2370	O
	FX6ASJ-06	-60	-6	0.21	0.37	-	1040	O
	FX20ASJ-03F	-30	-20	0.13	0.29	-	500	O
	FX30ASJ-03	-30	-30	0.061	0.12	-	2460	O
	FX6ASJ-03	-30	-6	0.29	0.62	-	550	O
	FS50ASJ-03F	30	50	0.0122	0.019	-	2100	O
	FS10AS-06	60	10	0.078	-	-	600	O
	FS10ASJ-06F	60	10	0.07	0.086	-	750	O
	FS30AS-06	60	30	0.03	-	-	1250	O
	FS30ASJ-06F	60	30	0.022	0.028	-	2600	O
	FS5AS-06	60	5	0.16	-	-	280	O
	FS5ASJ-06F	60	5	0.14	0.19	-	340	O
	FS10AS-2	100	10	0.23	-	-	600	O
	FS10ASJ-2	100	10	0.19	0.21	-	800	O
	FS30AS-2	100	30	0.1	-	-	1250	O
	FS30ASJ-2	100	30	0.084	0.091	-	1800	O
	FS5AS-2	100	5	0.47	-	-	280	O
	FS5ASJ-2	100	5	0.4	0.46	-	360	O
	FS10AS-3	150	10	0.17	-	-	1250	O
	FS10ASJ-3	150	10	0.16	0.165	-	1800	O
	FS5ASJ-3	150	5	0.35	0.37	-	800	O
TO-220 AB	2SJ221	-100	-20	0.16	0.22	-	1800	O
	2SJ247	-100	-8	0.3	0.45	-	880	O
	2SJ539	-60	-10	0.21	0.36	-	400	O
	2SJ540	-60	-12	0.15	0.23	-	580	O
	2SJ541	-60	-15	0.095	0.155	-	850	O
	2SJ542	-60	-18	0.065	0.11	-	1300	O
	2SJ543	-60	-20	0.055	0.095	-	1750	O
	2SJ544	-60	-30	0.037	0.055	-	2500	O
	H7N0203AB	20	90	0.003	0.0051(4.5V)	-	6800	O
	2SK2959	30	50	0.01	0.018	-	2000	O
	2SK3141	30	75	0.005	0.0085	-	6800	O
	H7N0307AB	30	60	0.0058	0.0115(4.5V)	-	2500	O
	H7N0308AB	30	70	0.0048	0.0085(4.5V)	-	3350	O
	H7N0312AB	30	85	0.0033	0.0058(4.5V)	-	6900	O
	2SK3136	40	75	0.0058	0.01	-	6800	O
	2SK2800	60	40	0.02	0.04	-	1500	O
	2SK2927	60	10	0.075	0.15	-	350	O
	2SK2928	60	15	0.052	0.105	-	500	O
	2SK2929	60	25	0.034	0.07	-	740	O
	2SK2930	60	35	0.026	0.05	-	1100	O
	2SK2931	60	45	0.013	0.025	-	2200	O
	2SK3069	60	75	0.0075	0.012	-	7100	O
	2SK3418	60	85	0.0055	0.009	-	9770	O
	H7N0602AB	60	85	0.0052	0.009(4.5V)	-	9000	O
	H7N0608AB	60	70	0.008	0.012(4.5V)	-	6200	O
	2SK3228	80	75	0.0075	0.012	-	9700	O
	H8N0801AB	80	60	0.0105	0.0138(4.5V)	-	4750	Δ
	2SK1300	100	10	0.25	0.35	-	525	O

Power MOS FET

■ General Switching(Low Voltage Power)

Package	Part No.	Ratings VDSS (V)	Ratings ID (A)	Characteristics RDS(on) (Ω) max. 10 V	4 V	2.5 V	Ciss (pF) typ	Status
TO-220 AB	2SK1301	100	15	0.13	0.18	-	860	O
	2SK1302	100	20	0.085	0.12	-	1300	O
	2SK3149	100	20	0.06	0.085	-	840	O
	H7N1004AB	100	30	0.035	0.045(4.5V)	-	2800	O
	2SK3154	150	15	0.13	0.15	-	850	O
	2SK3156	150	20	0.07	0.08	-	1750	O
	2SK3158	150	30	0.045	0.063	-	2600	O
	2SK740	150	10	0.15	-	-	1200	OB
	RJK1021DPN	100	70	0.02	-	-	2600	SPLA
	RJK1536DPN	150	50	0.03	-	-	5000	SPLA
TO-220	FS100UMJ-03F	30	100	0.004	0.0057	-	7600	O
	FS70UM-06	60	70	0.0075	-	-	6540	O
	FS70UMJ-06F	60	70	0.007	0.0083	-	8500	O
	FS70UM-2	100	70	0.02	-	-	6540	OB
	FS70UMJ-2	100	70	0.017	0.018	-	8200	O
	FS50UM-3	150	50	0.031	-	-	6540	OB
	FS50UMJ-3	150	50	0.03	0.031	-	8200	O
TO-220 CFM	2SJ531	-60	-18	0.065	0.11	-	1300	O
	2SJ532	-60	-20	0.055	0.095	-	1750	O
	2SJ533	-60	-30	0.037	0.055	-	2500	O
	2SJ545	-60	-12	0.15	0.23	-	580	O
	2SJ546	-60	-15	0.095	0.155	-	850	O
	2SJ471	-30	-30	0.035	0.06	-	1700	O
	2SK2736	30	30	0.028	0.05	-	750	O
	2SK2737	30	45	0.014	0.025	-	1570	O
	2SK2956	30	50	0.01	0.018	-	2000	O
	2SK3142	30	60	0.005	0.0085	-	6800	O
	H7N0308CF	30	60	0.0048	0.0085(4.5V)	-	3350	O
	2SK2529	60	50	0.01	0.016	-	3550	O
	2SK2738	60	40	0.02	0.04	-	1500	O
	2SK2932	60	10	0.075	0.15	-	350	O
	2SK2933	60	15	0.052	0.105	-	500	O
	2SK2934	60	25	0.034	0.07	-	740	O
	2SK2935	60	35	0.026	0.05	-	1100	O
	2SK2936	60	45	0.013	0.025	-	2200	O
	2SK3140	60	60	0.0075	0.012	-	7100	O
	2SK3229	80	60	0.0075	0.012	-	9800	O
	RJK1525DPS	150	17	0.11	-	-	680	OA
TO-220 FM	2SJ350	-120	-6	0.7	0.9	-	900	O
	2SJ222	-100	-20	0.16	0.22	-	1800	O
	2SJ248	-100	-8	0.3	0.45	-	880	O
	2SJ504	-60	-20	0.055	0.095	-	1750	O
	2SJ526	-60	-12	0.15	0.23	-	580	O
	2SJ534	-60	-18	0.065	0.11	-	1300	O
	2SJ535	-60	-30	0.037	0.055	-	2500	O
	2SJ547	-60	-10	0.21	0.36	-	400	O
	2SJ548	-60	-15	0.095	0.155	-	850	O
	2SK2937	60	25	0.034	0.07	-	740	O
	H7N0608FM	60	40	0.008	0.012(4.5V)	-	6200	O
	2SK1305	100	10	0.25	0.35	-	525	O
	2SK1306	100	15	0.13	0.18	-	860	O
	2SK1307	100	20	0.085	0.12	-	1300	O
	2SK3148	100	20	0.06	0.085	-	900	O
	2SK3212	100	10	0.13	0.17	-	420	O
	H7N1004FM	100	25	0.035	0.045(4.5V)	-	2800	O
	H7N1005FM	100	12	0.11	0.155(4.5V)	-	830	O
	2SK1318	120	20	0.12	0.16	-	1300	O
	2SK2202	120	7	0.4	0.55	-	420	O
	2SK3152	120	10	0.13	0.17	-	580	O
	2SK3153	120	15	0.085	0.11	-	860	ΔB
	2SK3155	150	15	0.13	0.15	-	850	O
	2SK3157	150	20	0.07	0.08	-	1750	O
	2SK3209	150	25	0.045	0.063	-	2600	O
TO-220 FN	FX20KMJ-3	-150	-20	0.29	0.32	-	4470	O
	FX30KMJ-3	-150	-30	0.1	0.111	-	11430	O
	FX20KMJ-2	-100	-20	0.26	0.32	-	2360	O
	FX30KMJ-2	-100	-30	0.143	0.176	-	4450	O
	FX50KMJ-2	-100	-50	0.05	0.061	-	11130	O
	FX20KMJ-06	-60	-20	0.097	0.166	-	2370	O
	FX30KMJ-06	-60	-30	0.054	0.092	-	4210	O
	FX50KMJ-06	-60	-50	0.0189	0.032	-	11610	O
	FX50KMJ-03	-30	-50	0.035	0.072	-	4270	O
	FX70KMJ-03	-30	-70	0.0123	0.025	-	11140	O
	FS100KMJ-03F	30	100	0.004	0.0057	-	7600	O
	FS50KMJ-03F	30	50	0.0122	0.019	-	2100	O
	FS70KMJ-03F	30	70	0.008	0.012	-	3250	O
	FS30KMJ-06F	60	30	0.022	0.028	-	2600	O
	FS50KM-06	60	50	0.022	-	-	2300	O
	FS50KMJ-06F	60	50	0.014	0.018	-	3850	O
	FS70KM-06	60	70	0.0075	-	-	6540	O

Package	Part No.	Ratings VDSS (V)	Ratings ID (A)	Characteristics RDS(on) (Ω) max. 10 V	4 V	2.5 V	Ciss (pF) typ	Status
TO-220 FN	FS70KMJ-06F	60	70	0.007	0.0083	-	8500	O
	FS30KMJ-2	100	30	0.084	0.091	-	1800	O
	FS50KM-2	100	50	0.055	-	-	2300	O
	FS50KMJ-2	100	50	0.048	0.052	-	3000	O
	FS70KM-2	100	70	0.02	-	-	6540	O
	FS70KMJ-2	100	70	0.017	0.018	-	8200	O
	FS30KM-3	150	30	0.092	-	-	2300	O
	FS30KMJ-3	150	30	0.086	0.09	-	3000	O
	FS50KM-3	150	50	0.031	-	-	6540	O
	FS50KMJ-3	150	50	0.03	0.031	-	8200	O
LDPAK(L)	2SJ505L	-60	-50	0.022	0.036	-	4100	O
	2SJ549L	-60	-12	0.15	0.23	-	580	O
	2SJ550L	-60	-15	0.095	0.155	-	850	O
	2SJ551L	-60	-18	0.065	0.11	-	1300	O
	2SJ552L	-60	-20	0.055	0.095	-	1750	O
	2SJ553L	-60	-30	0.037	0.055	-	2500	O
	2SJ479L	-30	-30	0.035	0.06	-	1700	O
	2SK2684L	30	30	0.028	0.05	-	750	O
	2SK2958L	30	75	0.007	0.014	-	4100	O
	2SK3134L	30	75	0.005	0.01	-	6800	O
	2SK2553L	60	50	0.01	0.016	-	3550	O
	2SK2912L	60	40	0.02	0.04	-	1500	O
	2SK2938L	60	25	0.034	0.07	-	740	O
	2SK2939L	60	35	0.026	0.05	-	1100	O
	2SK2940L	60	45	0.013	0.025	-	2200	O
	2SK3082L	60	10	0.075	0.15	-	350	O
	2SK3135L	60	75	0.0075	0.012	-	7100	O
	2SK3070L	40	75	0.0058	0.01	-	6800	O
	2SK1623L	100	20	0.085	0.12	-	1300	O
	2SK3150L	100	20	0.06	0.085	-	900	O
	2SK1620L	150	10	0.15	-	-	1200	O
	2SK3210L	150	30	0.045	0.063	-	2600	O
	H7N0307LD	30	60	0.0058	0.0115(4.5V)	-	2500	O
	H7N0308LD	30	70	0.0048	0.0085(4.5V)	-	3350	O
	H7N0310LD	30	30	0.01	0.019(5V)	-	1400	Δ
	H7N0311LD	30	45	0.0088	0.016(5V)	-	1650	Δ
	H7N0312LD	30	85	0.0033	0.0058(4.5V)	-	6900	O
	H7N0405LD	40	80	0.005	0.0087(4.5V)	-	5600	O
	H7N0401LD	40	95	0.0042	0.007(4.5V)	-	9300	Δ
	H7N0602LD	60	85	0.0052	0.009(4.5V)	-	9000	O
	H7N0608LD	60	70	0.008	0.012(4.5V)	-	6200	Δ
	H7N1002LD	100	75	0.01	0.015(4.5V)	-	9700	O
	H7N1004LD	100	30	0.035	0.045(4.5V)	-	2800	O
	H7N1005LD	100	15	0.11	0.155(4.5V)	-	830	O
	H5N1501LD	150	30	0.085	-	-	1350	Δ
	RJK1525DPJ	150	25	0.11	-	-	680	OA
	RJK1535DPJ	150	40	0.052	-	-	1420	OA
	RJK1526DPJ	150	50	0.042	-	-	1800	ΔA
LDPAK (S)-(1)	2SJ505S	-60	-50	0.022	0.036	-	4100	O
	2SJ549S	-60	-12	0.15	0.23	-	580	O
	2SJ550S	-60	-15	0.095	0.155	-	850	O
	2SJ551S	-60	-18	0.065	0.11	-	1300	O
	2SJ552S	-60	-20	0.055	0.095	-	1750	O
	2SJ553S	-60	-30	0.037	0.055	-	2500	O
	2SJ479S	-30	-30	0.035	0.06	-	1700	O
	2SK2684S	30	30	0.028	0.05	-	750	O
	2SK2958S	30	75	0.007	0.014	-	4100	O
	2SK3134S	30	75	0.005	0.01	-	6800	O
	2SK2553S	60	50	0.01	0.016	-	3550	O
	2SK2912S	60	40	0.02	0.04	-	1500	O
	2SK2938S	60	25	0.034	0.07	-	740	O
	2SK2939S	60	35	0.026	0.05	-	1100	O
	2SK2940S	60	45	0.013	0.025	-	2200	O
	2SK3082S	60	10	0.075	0.15	-	350	O
	2SK3135S	60	75	0.0075	0.012	-	7100	O
	2SK3070S	40	75	0.0058	0.01	-	6800	O
	2SK1623S	100	20	0.085	0.12	-	1300	O
	2SK3150S	100	20	0.06	0.085	-	900	O
	2SK1620S	150	10	0.15	-	-	1200	O
	2SK3210S	150	30	0.045	0.063	-	2600	O
	H7N0307LS	30	60	0.0058	0.0115(4.5V)	-	2500	O
	H7N0308LS	30	70	0.0048	0.0085(4.5V)	-	3350	O
	H7N0310LS	30	30	0.01	0.019(5V)	-	1400	Δ
	H7N0311LS	30	45	0.0088	0.016(5V)	-	1650	Δ
	H7N0312LS	30	85	0.0033	0.0058(4.5V)	-	6900	O
	H7N0405LS	40	80	0.005	0.0087(4.5V)	-	5600	O
	H7N0401LS	40	95	0.0042	0.007(4.5V)	-	9300	Δ
	H7N0602LS	60	85	0.0052	0.009(4.5V)	-	9000	O
	H7N0608LS	60	70	0.008	0.012(4.5V)	-	6200	Δ
	H7N1002LS	100	75	0.01	0.015(4.5V)	-	9700	O

Power MOS FET

■ General Switching(Low Voltage Power)

Package	Part No.	Ratings VDSS (V)	Ratings ID (A)	Characteristics RDS(on) (Ω) max. 10 V	4 V	2.5 V	Ciss (pF) typ	Status
LDPAK (S)-(1)	H7N1004LS	100	30	0.035	0.045(4.5V)	-	2800	O
	H7N1005LS	100	15	0.11	0.155(4.5V)	-	830	O
	H5N1501LS	150	30	0.085	-	-	1350	Δ
	RJK1525DPE	150	25	0.11	-	-	680	OA
	RJK1535DPE	150	40	0.052	-	-	1420	OA
	RJK1021DPE	100	70	0.02	-	-	2600	SPL♦A
	RJK1526DPE	150	50	0.042	-	-	1800	ΔA
	RJK1536DPE	150	50	0.03	-	-	5000	SPL♦A
LDPAK (S)-(2)	H7N0307LM	30	60	0.0058	0.0115(4.5V)	-	2500	O
	H7N0308LM	30	70	0.0048	0.0085(4.5V)	-	3350	O
	H7N0310LM	30	30	0.01	0.019(5V)	-	1400	Δ
	H7N0311LM	30	45	0.0088	0.016(5V)	-	1650	Δ
	H7N0312LM	30	85	0.0033	0.0058(4.5V)	-	6900	O
	H7N0405LM	40	80	0.005	0.0087(4.5V)	-	5600	O
	H7N0401LM	40	95	0.0042	0.007(4.5V)	-	9300	Δ
	H7N0602LM	60	85	0.0052	0.009(4.5V)	-	9000	O
	H7N0608LM	60	70	0.008	0.012(4.5V)	-	6200	Δ
	H7N1002LM	100	75	0.01	0.015(4.5V)	-	9700	O
	H7N1004LM	100	30	0.035	0.045(4.5V)	-	2800	O
	H7N1005LM	100	15	0.11	0.155(4.5V)	-	830	O
	H5N1501LM	150	30	0.085	-	-	1350	Δ
	RJK1525DPF	150	25	0.11	-	-	680	OA
	RJK1535DPF	150	40	0.052	-	-	1420	OA
	RJK1526DPF	150	50	0.042	-	-	1800	ΔA
TO-220S	FS100VSJ-03F	30	100	0.004	-	-	7600	O
	FS70VSJ-06F	60	70	0.007	-	-	8500	O
	FS50VSJ-2	100	50	0.048	-	-	3000	O
	FS30VSJ-3	150	30	0.086	-	-	3000	O
TO-3P	2SJ217	-60	-45	0.042	0.06	-	3800	O
	2SJ554	-60	-45	0.037	0.055	-	2500	O
	2SJ555	-60	-60	0.022	0.036	-	4100	O
	2SK2554	60	75	0.006	0.01	-	7700	O
	2SK2586	60	60	0.01	0.016	-	3550	O
	2SK2955	60	45	0.013	0.025	-	2200	O
	2SK3163	60	75	0.0075	0.012	-	7100	O
	2SK3419	60	90	0.0055	0.009	-	9770	O
	2SK1303	100	30	0.06	0.09	-	1750	O
	2SK1304	100	40	0.03	0.04	-	3500	O
	2SK3151	100	50	0.015	0.025	-	4000	O
	2SK3159	150	50	0.03	0.042	-	4000	O
	H5N1503P	150	70	0.027	-	-	5100	O
	H5N1506P	150	98	0.016	-	-	4900	O
	RJK1529DPK	150	70	0.025	-	-	2900	OA
TO-3P*	FX30SMJ-3	-150	-30	0.1	0.111	-	11430	O
	FX50SMJ-2	-100	-50	0.05	0.061	-	11130	O
	FX50SMJ-06	-60	-50	0.0189	0.032	-	11610	O
	FX70SMJ-03	-30	-70	0.0123	0.025	-	11140	O
	FS70SM-06	60	70	0.0075	-	-	6540	O
	FS70SMJ-2	100	70	0.017	0.018	-	8200	O
	FS50SM-3	150	50	0.031	-	-	6540	O
	FS50SMJ-3	150	50	0.03	0.031	-	8200	O
TO-3PFM	2SJ216	-60	-35	0.06	0.09	-	2400	O
	2SJ218	-60	-45	0.042	0.06	-	3800	O
	2SK1298	60	40	0.018	0.025	-	3600	O
TO-3PL	H5N5005PL	500	60	0.085	-	-	1550	O
CMFPAK -6	HAT1111C	-60	-2	0.307	0.45	-	290	O♦A
	HAT1108C	-30	-1.5	0.209	0.356	-	165	Δ♦A
	HAT1089C	-20	-2	-	0.103(4.5V)	0.168	360	O♦A
	HAT1090C	-20	-2.5	-	0.065(4.5V)	0.104	640	O♦A
	HAT1091C	-20	-1.5	-	0.175(4.5V)	0.287	205	Δ♦A
	HAT1096C	-20	-1	-	0.293(4.5V)	0.53	155	Δ♦A
	HAT1069C	-12	-3	-	0.052(4.5V)	0.07	1310	O♦A
	HAT1093C	-12	-3	-	0.054(4.5V)	0.076	900	O♦A
	HAT1094C	-12	-2.5	-	0.088(4.5V)	0.126	500	Δ♦A
	HAT1095C	-12	-2	-	0.14(4.5V)	0.205	300	Δ♦A
	HAT2204C	12	3.5	-	0.034(4.5V)	0.044	770	O♦A
	HAT2205C	12	3	-	0.05(4.5V)	0.069	445	O♦A
	HAT2206C	12	2	-	0.085(4.5V)	0.114	250	Δ♦A
	HAT2196C	20	2.5	-	0.058(4.5V)	0.093	285	O♦A
	HAT2202C	20	3	-	0.04(4.5V)	0.055	520	O♦A
	HAT2203C	20	2	-	0.09(4.5V)	0.15	165	O♦A
	HAT2207C	20	1.5	-	0.186(4.5V)	0.295	135	O♦A
	HAT2221C	30	1.5	0.206	0.305	-	(T.B.D)	Δ♦A
	HAT2268C	30	4	0.034	0.054(4.5V)	-	475	Δ♦A
	HAT2217C	60	3	0.133	0.183(4.5V)	-	275	O♦A
	HAT2240C	60	2.5	-	0.098	0.119	590	O♦A
	HAT2281C	60	2	-	0.142(4.5V)	0.177	335	O♦A
	HAT2282C	60	1.5	-	0.225	0.29	200	Δ♦A
	HAT2291C	12	1.8	-	-	0.256	95	SPL♦
	HAT1146C	-12	-1.2	-	-	0.535	123	SPL♦
CMFPAK -6	HAT3042C	12/ -12	1.8/ -1.2	-	-	0.256/ 0.535	95/ 123	SPL♦
	HAT2292C	20	1.5	-	-	0.37	70	Δ♦A
	HAT1147C	-20	-1	-	-	0.705	86	Δ♦A
	HAT3043C	20/ -20	1.5/ -1	-	-	0.37/ 0.905	70/ 86	Δ♦A
	HAT2286C	60	0.9	-	-	0.77	80	Δ♦A
	HAT1141C	-80	-0.8	0.8/ 1.05	-	-	170	SPL♦
TSOP-6	HAT1044M	-30	-4.5	0.06	0.105(4.5V)	-	600	O♦
	HAT1043M	-20	-4.4	-	0.065(4.5V)	0.11	750	O♦
	HAT2053M	20	6.1	-	0.033(4.5V)	0.048	570	O♦
	HAT2054M	30	6.3	0.021	0.052(4.5V)	-	620	O♦
FP-8DA (JEDEC: SOP-8)	HAT1035R	-150	-0.25	6.2	7.5	-	92	O♦A
	HAT1038R	-60	-3.5	0.15	0.23	-	600	O♦
	HAT1038RJ	-60	-3.5	0.15	0.23	-	600	O♦
	HAT1055R	-60	-5	0.076	0.13(4.5V)	-	1350	Δ♦
	HAT1055RJ	-60	-5	0.076	0.13(4.5V)	-	1350	Δ♦
	HAT1097R	-60	-5	0.076	0.13(4.5V)	-	1350	O♦
	HAT1097RJ	-60	-5	0.076	0.13(4.5V)	-	1350	O♦
	HAT1126R	-60	-6	0.05	0.085(4.5V)	-	2300	O♦
	HAT1126RJ	-60	-6	0.05	0.085(4.5V)	-	2300	O♦
	HAT1016R	-30	-4.5	0.09	0.18	-	660	O♦
	HAT1020R	-30	-5	0.07	0.13	-	860	O♦
	HAT1024R	-30	-3.5	0.16	0.34	-	350	O♦
	HAT1026R	-30	-7	0.037	0.065	-	1700	O♦
	HAT1036R	-30	-12	0.014	0.034	-	4200	O♦
	HAT1047R	-30	-14	0.012	0.025(4.5V)	-	3500	O♦
	HAT1047RJ	-30	-14	0.012	0.025(4.5V)	-	3500	O♦
	HAT1021R	-20	-5.5	-	0.06	0.085	1200	O♦
	HAT1023R	-20	-7	-	0.04	0.06	2250	O♦
	HAT1025R	-20	-4.5	-	0.095	0.15	860	O♦
	HAT1054R	-20	-6	-	0.03(4.5V)	0.05	1550	O♦
	HAT2026R	20	11	-	0.015	0.021	1760	O♦
	HAT2027R	20	7	-	0.038	0.053	720	O♦
	HAT2057RA	20	4	0.06	0.033	0.06(1.5V)	1100	O♦
	HAT2029R	28	7.5	-	0.033	0.043	780	O♦
	HAT2108R	28	11	-	0.015	0.022	2200	O♦
	HAT2016R	30	6.5	0.045	0.08	-	560	O♦
	HAT2020R	30	8	0.028	0.05	-	780	O♦
	HAT2022R	30	11	0.015	0.025	-	1450	O♦
	HAT2024R	30	5.5	0.065	0.11	-	310	O♦
	HAT2025R	30	8	0.026	0.05(4.5V)	-	660	O♦
	HAT2036R	30	12	0.015	0.03(4.5V)	-	1200	O♦
	HAT2040R	30	15	0.008	0.013	-	4400	O♦
	HAT2043R	30	8	0.022	0.029	-	1170	O♦
	HAT2044R	30	15	-	0.0095	0.013	3420	O♦
	HAT2064R	30	16	0.0063	0.01(4.5V)	-	2200	O♦
	HAT2068R	30	14	0.009	0.016(4.5V)	-	1650	O♦
	HAT2070R	30	12	0.014	0.022(4.5V)	-	1400	O♦
	HAT2071R	30	10	0.02	0.036(4.5V)	-	740	O♦
	HAT2092R	30	11	0.016	0.025(4.5V)	-	1400	O♦
	HAT2093R	30	9	0.023	0.039(4.5V)	-	750	O♦
	HAT2103R	30	4.5	0.065	0.13(4.5V)	-	220	O♦
	HAT2118R	30	16	0.0069	0.0125(4.5V)	-	2450	O♦
	HAT2195R	30	18	0.0058	0.0084(4.5V)	-	3400	O♦A
	HAT2197R	30	16	0.0067	0.0099(4.5V)	-	2650	O♦A
	HAT2198R	30	14	0.009	0.014(4.5V)	-	1650	O♦A
	HAT2199R	30	11	0.0165	0.025(4.5V)	-	1060	O♦A
	HAT2208R	30	9	0.024	0.035	-	-610	O♦A
	HAT2209R	30	7	0.036	0.055	-	-365	O♦A
	HAT2210R	30	7.5/ 8	0.024/ 0.022	0.040/ 0.029(4.5V)	-	630/ 1330	Δ♦A
	HAT2028R	60	4	0.1	0.16	-	280	O♦
	HAT2028RJ	60	4	0.1	0.16	-	280	O♦
	HAT2033R	60	7	0.038	0.053	-	740	O♦
	HAT2033RJ	60	7	0.038	0.053	-	740	O♦
	HAT2038R	60	5	0.058	0.084	-	520	O♦
	HAT2038RJ	60	5	0.058	0.084	-	520	O♦
	HAT2114R	60	6	0.032	0.05(4.5V)	-	1000	O♦
	HAT2114RJ	60	6	0.032	0.05(4.5V)	-	1000	O♦
	HAT2215R	80	3.4	0.115	0.145(4.5V)	-	400	O♦A
	HAT2058R	100	4	0.145	0.18	-	420	O♦A
	HAT2200R	100	8	0.028	0.033(4.5V)	-	-2390	O♦A
	HAT2201R	100	6	0.043	0.049(4.5V)	-	-1445	O♦A
	HAT2035R	150	0.5	2.2	2.7	-	95	O♦A
	HAT3019R	100/ -100	3.5/ -2.3	0.115/ 0.3	0.16/ 0.50(4.5V)	-	815/ 930	O♦A
	HAT3005R	150/ -150	0.5/ -0.25	2.2/ 6.2	2.7/ 7.5	-	95/ 92	O♦A

■ General Switching(Low Voltage Power)

Package	Part No.	Ratings		Characteristics				Status
				RDS(on) (Ω) max.			Ciss	
		VDSS (V)	ID (A)	10 V	4 V	2.5 V	(pF) typ	
FP-8DA	RJK0202DSP	20	16	-	-	0.0087	3650	SPL♦A
(JEDEC: SOP-8	HAT2019R	30	8	-	0.027	0.037	920	Δ♦
	HAT2276R	30	7.5	0.024	-	-	630	O♦A
	HAT2280R	30	6	0.034	-	-	410	O♦A
	RJK0316DSP	30	16	0.0064	-	-	2080	O♦A
	RJK0317DSP	30	10	0.018	-	-	640	O♦A
	RJK0348DSP	30	22	0.0034	0.0045(4.5V)	-	5100	SPL♦A
	RJK0349DSP	30	20	0.0038	0.0050(4.5V)	-	3850	SPL♦A
	RJK0352DSP	30	18	0.0056	0.0077(4.5V)	-	2440	SPL♦A
	RJK0353DSP	30	18	0.0059	0.0083(4.5V)	-	2180	SPL♦A
	RJK0354DSP	30	16	0.007	0.0099(4.5V)	-	1740	SPL♦A
	RJK0355DSP	30	12	0.0111	0.0168(4.5V)	-	860	SPL♦A
	RJK0366DSP	30	11	0.0143	0.0196(4.5V)	-	990	SPL♦A
	RJK0369DSP	30	9	0.0182	0.0245(4.5V)	-	810	SPL♦A
	RJK0371DSP	30	8	0.0215	0.0308(4.5V)	-	590	SPL♦A
	HAT1020RJ	-30	-5	0.07	0.13	-	860	O♦
	HAT1123R	-30	-6	0.032	-	-	1300	O♦
	HAT2218R	30/ 30	7.5/ 8	0.024/ 0.022	0.040/ 0.029(4.5V)	-	630/ 1330	O♦A
	HAT2219R	30/ 30	7.5/ 8	0.024/ 0.022	0.040/ 0.029(4.5V)	-	630/ 1330	Δ♦A
	HAT3004R	30/ -30	5.5/ -3.5	0.065/ 0.16	0.11/ 0.34	-	310/ 350	O♦
	HAT3006R	30/ -30	6.5/ -4.5	0.045/ 0.09	0.08/ 0.18	-	560/ 660	O♦
	HAT3029R	30/ -30	6/ -6	0.034/ 0.032	-	-	410/ 1330	O♦A
	HAT3037R	45/ -45	5/ -4	0.055/ 0.088	-	-	420/ 660	Δ♦A
	HAT2256R	60	8	0.03	-	-	1210	O♦A
	HAT2275R	60	6.6	0.032	-	-	1210	Δ♦
	HAT3008R	60/ -60	5/ -3.5	0.058/ 0.15	0.084/ 0.23	-	520/ 600	O♦
	HAT3008RJ	60/ -60	5/ -3.5	0.058/ 0.15	0.084/ 0.23	-	520/ 600	O♦
	HAT3010R	60/ -60	6/ -5	0.032/ 0.076	0.045/ 0.13(4.5V)	-	1050/ 1350	O♦
	HAT3018R	60/ -60	6/ -5	0.035/ 0.76	0.05/ 0.13(4.5V)	-	1000/ 1350	O♦
	HAT3018RJ	60/ -60	6/ -5	0.035/ 0.76	0.05/ 0.13(4.5V)	-	1000/ 1350	O♦
	HAT3031R	60/ -60	6.6/ -3.4	-	-	0.032/ 0.120	1210/ 750	O♦A
	HAT3038R	60/ -60	5/ -4	0.06/ 0.088	-	-	690/ 1350	O♦A
	HAT3040R	60/ -60	6.6/ -4.4	0.032/ 0.065	-	-	1250/ 1300	Δ♦A
	HAT3021R	80/ -80	3.4/ -2.6	0.115/ 0.21	0.145/ 0.29(4.5V)	-	400/ 930	O♦A
	HAT3032R	80/ -80	4.4/ -3	0.077/ 0.145	-	-	640/ 1290	O♦A
TTP-8DV (TSSOP-8)	HAT2051T	30	1	-	0.2	0.3	155	Δ♦
	HAT2050T	100	1	0.75	1	-	90	O♦
LFPAK	HAT1127H	-30	-40	0.0045	0.0077(4.5V)	-	5600	O♦A
	HAT1139H	-30	-30	0.009	0.0145	-	3200	O♦A
	HAT2134H	20	60	0.0029	0.0058(4.5V)	-	4500	O♦
	HAT2160H	20	60	0.0026	0.0041(4.5V)	-	7750	O♦A
	HAT2096H	30	40	0.0053	0.01(4.5V)	-	2200	O♦
	HAT2099H	30	50	0.0037	0.0073(4.5V)	-	4750	O♦
	HAT2116H	30	30	0.0082	0.0153(4.5V)	-	1650	O♦
	HAT2143H	30	40	0.0061	0.0115(4.5V)	-	2450	O♦
	HAT2164H	30	60	0.0031	0.0044(4.5V)	-	7600	O♦
	HAT2165H	30	55	0.0033	0.0053(4.5V)	-	5180	O♦
	HAT2166H	30	45	0.0038	0.0061(4.5V)	-	4200	O♦
	HAT2167H	30	40	0.0055	0.0093(4.5V)	-	2800	O♦
	HAT2168H	30	30	0.0079	0.0135(4.5V)	-	1780	O♦
	RJK0301DPB	30	60	0.0028	0.004(4.5V)	-	5000	O♦A
	RJK0302DPB	30	50	0.0031	0.0046(4.5V)	-	4200	O♦A
	RJK0303DPB	30	40	0.0037	0.0056(4.5V)	-	3300	O♦A
	RJK0304DPB	30	35	0.048	0.0072(4.5V)	-	2500	O♦A
	RJK0305DPB	30	30	0.008	0.013(4.5V)	-	1250	O♦A
	HAT2129H	40	30	0.0075	-	-	3200	O♦

Package	Part No.	Ratings		Characteristics				Status
				RDS(on) (Ω) max.			Ciss	
		VDSS (V)	ID (A)	10 V	4 V	2.5 V	(pF) typ	
LFPAK	HAT2137H	40	45	0.0048	-	-	6200	O♦
	HAT2139H	40	20	0.0115	-	-	2000	O♦
	HAT2169H	40	50	0.0035	0.006(4.5V)	-	6650	O♦A
	HAT2170H	40	45	0.0042	-	-	3600	O♦A
	HAT2171H	40	40	0.0048	-	-	2280	O♦A
	HAT2172H	40	30	0.0075	-	-	1445	O♦A
	HAT2266H	60	30	0.012	0.016(4.5V)	-	3600	O♦A
	HAT2267H	80	25	0.016	-	-	2150	O♦A
	HAT2279H	80	30	0.012	0.015	-	3520	O♦A
	HAT2140H	100	25	0.016	-	-	6350	O♦
	HAT2141H	100	15	0.0275	-	-	3200	O♦
	HAT2142H	100	10	0.044	-	-	2000	O♦
	HAT2173H	100	25	0.015	-	-	4350	O♦A
	HAT2174H	100	20	0.027	-	-	2280	O♦A
	HAT2175H	100	15	0.042	-	-	1445	O♦A
	HAT2270H	30	50	0.0039	-	-	7700	O♦A
	HAT2283H	30	40	0.0037	-	-	5100	Δ♦A
	HAT2284H	30	35	0.0043	-	-	4000	Δ♦A
	RJK0328DPB	30	60	0.0021	0.0029(4.5V)	-	6380	SPL♦A
	RJK0329DPB	30	55	0.0023	0.0034(4.5V)	-	5330	SPL♦A
	RJK0330DPB	30	45	0.0027	0.0039(4.5V)	-	4300	SPL♦A
	RJK0331DPB	30	40	0.0034	0.0049(4.5V)	-	3220	SPL♦A
	RJK0332DPB	30	35	0.0047	0.0070(4.5V)	-	2180	SPL♦A
LFPAK-i	HAT2270N	30	50	0.0037	-	-	7700	Δ♦A
	HAT2160N	20	60	0.0029	-	-	7750	O♦A
	HAT2164N	30	60	0.0034	-	-	7600	Δ♦A
	HAT2165N	30	55	0.0036	0.0056	-	5180	O♦A
	HAT2166N	30	45	0.0041	0.0064	-	4200	O♦A
	HAT2167N	30	40	0.0058	-	-	2800	Δ♦A
	HAT2168N	30	30	0.0082	0.0138	-	1780	O♦A
	HAT2283N	30	40	0.004	-	-	5100	Δ♦A
	HAT2284N	30	35	0.0046	-	-	4000	Δ♦A
	RJK0301DPC	30	60	0.0031	-	-	5000	O♦A
	RJK0302DPC	30	50	0.0034	-	-	4200	O♦A
	RJK0303DPC	30	40	0.004	-	-	3300	O♦A
	RJK0304DPC	30	35	0.0051	-	-	2500	O♦A
	RJK0305DPC	30	30	0.0083	-	-	1250	O♦A
	HAT2169N	40	50	0.0038	-	-	6650	Δ♦A
	HAT2170N	40	45	0.0045	-	-	3600	Δ♦A
	HAT2171N	40	40	0.0051	-	-	2280	Δ♦A
	HAT2172N	40	30	0.0078	-	-	1445	O♦A
	HAT2279N	80	30	0.0123	-	-	3520	Δ♦A
	HAT2173N	100	25	0.0153	-	-	4350	O♦A
	HAT2174N	100	20	0.027	-	-	2280	O♦A
	HAT2175N	100	15	0.042	-	-	1445	O♦A
WPAK	HAT2244WP	80	30	0.0125	0.0155(4.5V)	-	3520	O♦A
	HAT2200WP	100	20	-	23(8V)	-	-2390	O♦A
	HAT2201WP	100	15	-	34(8V)	-	-1445	O♦A
	HAT2183WP	150	20	0.064	-	-	1200	O♦A
	HAT2184WP	150	14	0.11	-	-	710	Δ♦A
	HAT2185WP	150	10	0.19	-	-	430	O♦A
	HAT2195WP	30	40	0.0053	-	-	3400	O♦A
	HAT2197WP	30	35	0.0062	-	-	2650	Δ♦A
	HAT2198WP	30	25	0.0085	-	-	1650	O♦A
	HAT2199WP	30	15	0.016	-	-	1060	Δ♦A
	RJK0346DPA	30	65	0.002	0.0027(4.5V)	-	7650	SPL♦A
	RJK0348DPA	30	50	0.0025	0.0035(4.5V)	-	5100	SPL♦A
	RJK0349DPA	30	45	0.0031	0.0043(4.5V)	-	3850	SPL♦A
	RJK0351DPA	30	40	0.004	0.0059(4.5V)	-	2750	SPL♦A
	RJK0353DPA	30	35	0.0052	0.0076(4.5V)	-	2180	SPL♦A
	RJK0355DPA	30	30	0.0107	0.0165(4.5V)	-	860	SPL♦A
	RJK0364DPA	30	35	0.0083	0.0118(4.5V)	-	1600	SPL♦A
	RJK0365DPA	30	30	0.0098	0.0143(4.5V)	-	1180	SPL♦A
	RJK0366DPA	30	25	0.0137	0.0190(4.5V)	-	990	SPL♦A
	RJK0368DPA	30	20	0.0159	0.0232(4.5V)	-	730	SPL♦A
	RJK0369DPA	30	18	0.0176	0.0244(4.5V)	-	810	SPL♦A
	HAT2285WP	30/ 30	14/ 22	0.024/ 0.018	0.04/ 0.023(4.5V)	-	630/ 1930	O♦A
FP-11DTV (HSOP-11)	HAT2180RP	30/ 30	10/ 16	0.015/ 0.0088	0.022/ 0.0115	-	1090/ 3040	Δ♦B
	HAT2211RP	30/ 30	8.0/ 11	0.023/ 0.018	0.038/ 0.023(4.5V)	-	TBD/ TBD	Δ♦B

Notes) O: In Mass Production
SPL: Samples are available
Δ: Long delivery date(Lead time: 3 months)
A: Promoted
B: Not recommend for new design
♦: Large order only (Unit: Refer to packing unit (P.19))
OS: Overseas sales only

Samples of HAT series are available as type number, HATxxxxxWS.

Power MOS FET

■ General Switching(Medium and High Voltage Power)

Package	Part No.	Ratings VDSS (V)	Ratings ID (A)	Characteristics RDS(on) (Ω) max. 10 V	4 V	2.5 V	Ciss (pF) typ	Status
TO-92(1)	2SK4150	250	0.4	-	5.7	5.9	80	O♦A
TO-92	2SK4093	250	1	-	-	2.7	140	O♦A
MOD	RJK6011DJE	600	0.1	52	-	-	25	O♦A
UPAK	2SJ186	-200	-0.5	12	-	-	75	Δ♦
	2SK1334	200	1	3.8	-	-	80	O♦
DPAK	2SJ181L	-600	-0.5	25	-	-	220	O
(L)-(1)	2SJ130L	-300	-1	8.5	-	-	235	O
	2SJ319L	-200	-3	2.3	-	-	330	O
	2SK1838L	250	1	8	-	-	60	O
	2SK1151L	450	1.5	5.5	-	-	160	O
	2SK1152L	500	1.5	6	-	-	160	O
	2SK1880L	600	1.5	8	-	-	250	O
DPAK	H5N2004DL	200	8	0.48	-	-	450	O
(L)-(2)	H5N2005DL	200	6	0.65	-	-	300	O
	H5N2504DL	250	7	0.63	0.67	-	570	O
	H5N2505DL	250	5	0.89	-	-	300	O
	H5N2508DL	250	7	0.63	-	-	450	O
	H5N2510DL	250	5	0.89	0.97	-	365	O
	H5N5006DL	500	3	3	-	-	365	O
DPAK(S)	2SJ181S	-600	-0.5	25	-	-	220	O
	2SJ130S	-300	-1	8.5	-	-	235	O
	2SJ319S	-200	-3	2.3	-	-	330	O
	H5N2004DS	200	8	0.48	-	-	450	O
	H5N2005DS	200	6	0.65	-	-	300	O
	2SK1838S	250	1	8	-	-	60	O
	H5N2504DS	250	7	0.63	0.67	-	570	O
	H5N2505DS	250	5	0.89	-	-	300	O
	H5N2508DS	250	7	0.63	-	-	450	O
	H5N2510DS	250	5	0.89	0.97	-	365	O
	2SK1151S	450	1.5	5.5	-	-	160	O
	H5N5006DS	500	3	3	-	-	365	O
	2SK1880S	600	1.5	8	-	-	250	O
	2SK1152S	500	1.5	6	-	-	160	O
MP-3A	RJK5003DPD	500	5	1.5	-	-	550	O♦A
	RJK6002DPD	600	2	6.8	-	-	165	Δ♦A
TO-220	2SK1667	250	7	0.55	-	-	690	O
AB	2SK1761	250	12	0.35	-	-	1100	O
	2SK3736	250	24	-	0.7	0.8	450	O
	2SK1400A	350	7	0.8	-	-	635	O
	2SK1153	450	3	2.8	-	-	330	O
	2SK1155	450	5	1.4	-	-	640	O
	2SK1157	450	7	0.8	-	-	1050	O
	2SK1154	500	3	3	-	-	330	O
	2SK1156	500	5	1.5	-	-	640	O
	2SK1158	500	7	0.9	-	-	1050	O
	2SK2408	500	7	0.9	-	-	1100	O
	2SK1402A	650	4	2.6	-	-	600	O
	2SK1338	900	2	7	-	-	425	O
	2SK1807	900	4	4	-	-	740	O
TO-220	2SK2425	250	7	0.55	-	-	690	O
CFM	H5N2502CF	250	18	0.105	-	-	2300	Δ
	H5N2512CF	250	18	0.105	-	-	2200	O
	H5N3007CF	300	15	0.16	-	-	2180	O
	2SK2114	450	5	1.4	-	-	640	O
TO-220	2SK1957	200	7	0.45	-	-	700	O
FM	2SK3160	200	10	0.17	0.19	-	1100	O
	2SK3162	200	20	0.075	0.085	-	2420	O
	2SK3177	200	15	0.115	0.125	-	1600	O
	2SK1668	250	7	0.55	-	-	690	O
	2SK1762	250	12	0.35	-	-	1100	O
	2SK1566	450	7	0.8	-	-	1050	O
	2SK1567	500	7	0.9	-	-	1050	O
	H5N5006FM	500	3	3	-	-	365	O
	2SK1404	600	5	1.5	-	-	1000	O
	2SK1637	600	4	2.4	-	-	600	O
	2SK1808	900	4	4	-	-	740	O
TO-220	H5N2007FN	200	25	0.047	-	-	2200	O
FN	H5N2517FN	250	20	0.072	-	-	2200	Δ
	H5N2901FN	290	18	0.09	-	-	2200	O
	RJK4007DPP	400	7.6	0.55	-	-	850	OA
	RJK5012DPP	500	12	0.62	-	-	1100	OA
	RJK5014DPP	500	19	0.39	-	-	1800	ΔA
	RJK6014DPP	600	16	0.575	-	-	1800	ΔA
	H5N2512FN	250	18	0.105	-	-	2200	Δ
	H5N3007FN	300	15	0.16	-	-	2180	Δ
	RJK5013DPP	500	14	0.465	-	-	1450	ΔA
	RJK5026DPP	500	6	1.7	-	-	440	ΔA
	RJK6012DPP	600	10	0.92	-	-	1100	OA
	RJK6013DPP	600	11	0.7	-	-	1450	OA
LDPAK(L)	2SK3161L	200	15	0.115	0.125	-	1600	O
LDPAK(L)	2SK3211L	200	25	0.075	0.085	-	2420	O
	H5N2001LD	200	20	0.125	-	-	1350	O
	RJK2006DPJ	200	40	0.059	-	-	1800	ΔA
	2SK1636L	250	15	0.27	-	-	1250	O
	H5N2501LD	250	18	0.18	-	-	1350	Δ
	H5N3005LD	300	15	0.255	-	-	1300	Δ
	2SK1313L	450	5	1.4	-	-	640	O
	2SK1315L	450	8	0.7	-	-	1150	O
	2SK1540L	450	7	0.8	-	-	1050	O
	2SK1314L	500	5	1.5	-	-	640	O
	2SK1316L	500	8	0.8	-	-	1150	O
	H5N5006LD	500	3.5	3	-	-	365	O
	2SK1528L	900	4	4	-	-	740	O
	2SK1647L	900	2	7	-	-	425	O
	H5P2501LD	-250	-10	0.48	-	-	1500	Δ
LDPAK	2SK3161S	200	15	0.115	0.125	-	1600	O
(S)-(1)	2SK3211S	200	25	0.075	0.085	-	2420	O
	H5N2001LS	200	20	0.125	-	-	1350	O
	RJK2006DPE	200	40	0.059	-	-	1800	ΔA
	2SK1636S	250	15	0.27	-	-	1250	O
	H5N2501LS	250	18	0.18	-	-	1350	Δ
	H5N3005LS	300	15	0.255	-	-	1300	Δ
	RJK4012DPE	400	15	0.41	-	-	1100	ΔA
	RJK4013DPE	400	17	0.3	-	-	1450	Δ♦A
	2SK1313S	450	5	1.4	-	-	640	O
	2SK1315S	450	8	0.7	-	-	1150	O
	2SK1540S	450	7	0.8	-	-	1050	O
	RJK4512DPE	450	14	0.51	-	-	1100	Δ♦A
	2SK1314S	500	5	1.5	-	-	640	O
	2SK1316S	500	8	0.8	-	-	1150	O
	H5N5006LS	500	3.5	3	-	-	365	O
	RJK5012DPE	500	12	0.62	-	-	1100	Δ♦A
	RJK5013DPE	500	14	0.465	-	-	1450	Δ♦A
	RJK6012DPE	600	10	0.92	-	-	1100	O♦A
	RJK6013DPE	600	11	0.7	-	-	1450	Δ♦A
	2SK1528S	900	4	4	-	-	740	O
	2SK1647S	900	2	7	-	-	425	O
	H5P2501LS	-250	-10	0.48	-	-	1500	Δ
	RJK4513DPE	450	16	0.38	-	-	1450	Δ♦A
	RJK6026DPE	600	5	2.4	-	-	440	O♦A
LDPAK	H5N2001LM	200	20	0.125	-	-	1350	O
(S)-(2)	RJK2006DPF	200	40	0.059	-	-	1800	ΔA
	H5N2501LM	250	18	0.18	-	-	1350	Δ
	H5N3005LM	300	15	0.255	-	-	1300	Δ
	H5N5006LM	500	3.5	3	-	-	365	O
	H5P2501LM	-250	-10	0.48	-	-	1500	Δ
TO-3P	H5N2003P	200	60	0.042	-	-	5150	O
	H5N2008P	200	96	0.023	-	-	4900	O
	H5N2305P	230	60	0.038	-	-	5200	O
	2SK1669	250	30	0.095	-	-	3100	O
	2SK1671	250	30	0.095	-	-	3000	O
	2SK2007	250	20	0.15	-	-	2340	O
	H5N2501P	250	20	0.18	-	-	1350	Δ
	H5N2503P	250	50	0.055	-	-	5200	O
	H5N2507P	250	70	0.055	-	-	5000	O
	H5N2509P	250	30	0.069	-	-	3600	O
	H5N2514P	250	70	0.03	-	-	5500	O
	H5N2515P	250	55	0.044	-	-	3800	O
	H5N2519P	250	65	0.035	-	-	4900	O
	RJK2508DPK	250	50	0.064	-	-	2600	OA
	RJK2511DPK	250	65	0.034	-	-	4900	OA
	H5N2801P	280	70	0.043	-	-	5400	O
	H5N3003P	300	40	0.069	-	-	5150	O
	H5N3004P	300	25	0.093	-	-	3600	O
	H5N3008P	300	40	0.069	-	-	5150	O
	H5N3011P	300	88	0.048	-	-	5000	O
	RJK4014DPK	400	24	0.24	-	-	1800	ΔA
	RJK4018DPK	400	43	0.1	-	-	4100	ΔA
	2SK1161	450	10	0.8	-	-	1050	O
	2SK1165	450	12	0.55	-	-	1450	O
	2SK1167	450	15	0.36	-	-	2050	O
	2SK1169	450	20	0.25	-	-	2800	O
	2SK1515	450	10	0.8	-	-	1100	O
	2SK1517	450	20	0.25	-	-	3050	O
	RJK4514DPK	450	22	0.3	-	-	1800	ΔA
	RJK4518DPK	450	39	0.13	-	-	4100	OA
	2SK1162	500	10	0.9	-	-	1050	O
	2SK1166	500	12	0.6	-	-	1450	O
	2SK1168	500	15	0.4	-	-	2050	O
	2SK1170	500	20	0.27	-	-	3050	O

Power MOS FET

■ General Switching(Medium and High Voltage Power)

Package	Part No.	Ratings VDSS (V)	Ratings ID (A)	Characteristics RDS(on) (Ω) max. 10 V	4 V	2.5 V	Ciss (pF) typ	Status
TO-3P	2SK1516	500	10	0.9	-	-	1100	O
	2SK1518	500	20	0.27	-	-	2800	O
	2SK2568	500	12	0.6	-	-	1560	O
	H5N5007P	500	25	0.225	-	-	3900	O
	H5N5012P	500	25	0.225	-	-	3600	Δ
	H5N5015P	500	32	0.17	-	-	4600	O
	RJK5013DPK	500	14	0.465	-	-	1450	OA
	RJK5014DPK	500	19	0.38	-	-	1800	OA
	RJK5015DPK	500	25	0.24	-	-	2600	OA
	RJK5018DPK	500	35	0.155	-	-	4100	OA
	RJK5020DPK	500	40	0.118	-	-	5150	OA
	2SK1573	600	15	0.5	-	-	3150	O
	2SK1968	600	12	0.88	-	-	1800	O
	H5N6001P	600	20	0.38	-	-	4640	O
	RJK6014DPK	600	16	0.575	-	-	1800	OA
	RJK6015DPK	600	21	0.36	-	-	2600	OA
	RJK6018DPK	600	30	0.235	-	-	4100	ΔA
	RJK6020DPK	600	32	0.175	-	-	5150	OA
	2SK1403A	650	8	1.4	-	-	1180	O
	2SK1339	900	3	7	-	-	425	O
	2SK1340	900	5	4	-	-	740	O
	2SK1341	900	6	3	-	-	980	O
	2SK1342	900	8	1.6	-	-	1730	O
	2SK1933	900	10	1.2	-	-	2620	O
	2SK1773	1000	5	2	-	-	1700	O
	2SK1934	1000	8	1.6	-	-	2690	O
	2SK1317	1500	2.5	12	-	-	990	O
	2SK1835	1500	4	7	-	-	1700	O
	H5N2802P	280	50	0.066	-	-	3600	Δ
	H5N2803P	280	55	0.047	-	-	5150	Δ
	RJK3008DPK	300	40	0.093	-	-	2600	OA
	RJK4015DPK	400	30	0.165	-	-	2600	ΔA
	RJK4515DPK	450	27	0.2	-	-	2600	ΔA
TO-3PFM	RJK2009DPM	200	60	0.034	-	-	2900	OA
	H5N2301PF	230	25	0.085	-	-	2250	O
	H5N2305PF	230	35	0.038	-	-	5200	O
	H5N2306PF	230	30	0.052	-	-	3500	O
	2SK1670	250	30	0.095	-	-	3100	O
	2SK2008	250	20	0.15	-	-	2340	O
	H5N2509PF	250	30	0.069	0.09	-	3600	O
	H5N2802PF	280	25	0.066	-	-	3600	Δ
	H5N2803PF	280	30	0.047	-	-	5150	Δ
	2SK1328	450	12	0.55	-	-	1450	O
	2SK1329	500	12	0.6	-	-	1450	O
	2SK1832	500	10	0.9	-	-	1050	O
	2SK1405	600	15	0.5	-	-	3150	O
	2SK1775	900	8	1.6	-	-	1730	O
	2SK1859	900	6	3	-	-	980	O
	2SK2225	1500	2	12	-	-	990	O
TO-3PL	2SK1947	250	50	0.06	-	-	5810	O

Package	Part No.	Ratings VDSS (V)	Ratings ID (A)	Characteristics RDS(on) (Ω) max. 10 V	4 V	2.5 V	Ciss (pF) typ	Status
TO-3PL	2SK1948	250	50	0.06	-	-	5830	O
	H5N2513PL	250	100	0.026	-	-	9300	O
	H5N2801PL	280	70	0.043	-	-	5400	Δ
	2SK1519	450	30	0.15	-	-	5800	O
	2SK1521	450	50	0.1	-	-	8700	O
	2SK1526	450	40	0.15	-	-	5800	O
	2SK1628	450	30	0.25	-	-	2800	O
	2SK1520	500	30	0.16	-	-	5800	O
	2SK1522	500	50	0.11	-	-	8700	O
	2SK1527	500	40	0.16	-	-	5800	O
	2SK1629	500	30	0.27	-	-	2800	O
	2SK1837	500	50	0.11	-	-	8150	O
	2SK1971	500	35	0.23	-	-	4320	O
	H5N5004PL	500	50	0.11	-	-	7630	O
	H5N5011PL	500	50	0.115	-	-	7700	O
	H5N5016PL	500	50	0.128	-	-	5300	O
	2SK2393	1500	8	2.8	-	-	4370	O
	H5N6004PL	600	35	0.21	-	-	5700	Δ
TTP-8DV (TSSOP-8)	HAT1065T	-200	-0.25	6.2	7.5	-	140	O♦A
	HAT2085T	200	1.4	0.64	-	-	300	O♦A
	HAT2105T	200	0.5	2.2	2.7	-	120	Δ♦A
	HAT2080T	250	1.2	0.85	-	-	300	O♦A
	HAT3015T	200/ -200	0.5/ -0.25	2.2/ 6.2	2.7/ 7.5	-	120/ 140	O♦A
FP-8DA (JEDEC: SOP-8	HAT1064R	-350	-0.3	25	-	-	220	O♦A
	HAT1065R	-200	-0.25	6.2	7.5	-	140	Δ♦A
	HAT2077R	200	3	0.235	-	-	830	O♦A
	HAT2085R	200	2	0.64	-	-	300	O♦A
	HAT2088R	200	2	0.44	-	-	450	O♦A
	HAT2105R	200	0.5	2.2	2.7	-	120	Δ♦A
	HAT2080R	250	1.7	0.85	-	-	300	O♦A
	HAT2087R	250	2.5	0.31	-	-	830	O♦A
	HAT2089R	250	2	0.6	-	-	450	O♦A
	HAT2131R	350	0.9	3	3.2	-	460	O♦A
	HAT2220R	450	0.7	6.5	-	-	140	O♦
	HAT2179R	600	0.7	4.5	-	-	280	Δ♦
	HAT2226R	600	0.1	52	-	-	25	O♦A
	HAT3015R	200/ -200	0.5/ -0.25	2.2/ 6.2	2.7/ 7.5	-	120/ 140	O♦A
LFPAK	HAT2132H	200	6	0.45	-	-	450	Δ♦A
	HAT2119H	250	5	0.63	-	-	450	O♦A
WPAK	HAT2299WP	150	14	0.11	-	-	710	O♦A
	HAT2187WP	200	17	0.094	-	-	1200	O♦A
	HAT2188WP	200	12	0.157	-	-	710	O♦A
	HAT2189WP	200	8.5	0.27	-	-	430	O♦A
	HAT2287WP	200	17	0.094	-	-	1200	O♦A
	HAT2191WP	250	14	0.138	-	-	1200	O♦A
	HAT2192WP	250	10	0.23	-	-	710	O♦A
	HAT2193WP	250	7	0.4	-	-	430	O♦A

Notes) O: In Mass Production
SPL: Samples are available
Δ: Long delivery date(Lead time: 3 months)
A: Promoted
B: Not recommend for new design
♦: Large order only (Unit: Refer to packing unit (P.19))
OS: Overseas sales only

Power MOS FET

■ General Amplification

Package	Part No.	Ratings		Characteristics			Status
		V_{DSS} (V)	I_D (A)	|yfs| (S) typ	V_{DS}(sat) (V_{DS}(on)) (V) max	Ciss (pF) typ	
TO-220 AB	2SJ76	(-140)	-0.5	0.035	-2	120	O
	2SJ77	(-160)	-0.5	0.035	-2	120	O
	2SJ78	(-180)	-0.5	0.035	-2	120	O
	2SJ79	(-200)	-0.5	0.035	-2	120	O
	2SK213	(140)	0.5	0.04	2	90	O
	2SK214	(160)	0.5	0.04	2	90	O
	2SK215	(180)	0.5	0.04	2	90	O
	2SK216	(200)	0.5	0.04	2	90	O
TO-3P	2SJ160	(-120)	-7	1.0	-12	900	O

Package	Part No.	Ratings		Characteristics			Status
		V_{DSS} (V)	I_D (A)	|yfs| (S) typ	V_{DS}(sat) (V_{DS}(on)) (V) max	Ciss (pF) typ	
TO-3P	2SJ161	(-140)	-7	1.0	-12	900	O
	2SJ162	(-160)	-7	1.0	-12	900	O
	2SJ351	(-180)	-8	1.0	-12	800	O
	2SJ352	(-200)	-8	1.0	-12	800	O
	2SK1056	(120)	7	1.0	12	600	O
	2SK1057	(140)	7	1.0	12	600	O
	2SK1058	(160)	7	1.0	12	600	O
	2SK2220	(180)	8	1.0	12	600	O
	2SK2221	(200)	8	1.0	12	600	O

■ Thermal FET

Package	Part No.	Ratings		Characteristics			Status
				R_{DS}(on) (Ω) max			
		V_{DSS} (V)	I_D (A)	4 V (5 V) [6 V]	10 V	Tsd (°C) typ	
TO-220 AB	HAF1001	-60	-15	0.13	0.09	175	OB
	HAF2001	60	20	0.065	0.043	175	OB
	HAF2014	60	40	0.033	0.02	175	O
TO-220 FM	HAF2002	60	20	0.065	0.043	175	OB
	HAF2005	60	40	0.033	0.02	175	O
LDPAK(L)/ (S)-(1)	HAF1002(L)/(S)	-60	-15	0.13	0.09	175	OB
	HAF1008(L)/(S)	-60	-20	0.08	0.054	175	O
	HAF1009(L)/(S)	-60	-40	0.05	0.027	175	O
	RJE0601JPE	-60	-40	[0.04]	0.027	175	SPL A
	HAF2012(L)/(S)	60	20	0.065	0.043	175	OB

Package	Part No.	Ratings		Characteristics			Status
				R_{DS}(on) (Ω) max			
		V_{DSS} (V)	I_D (A)	4 V (5 V) [6 V]	10 V	Tsd (°C) typ	
LDPAK(L)/ (S)-(1)	HAF2017(L)/(S)	60	20	0.053	0.043	175	O
	HAF2011(L)/(S)	60	40	0.033	0.02	175	O
	HAF2021(L)/(S)	60	50	0.015 (6V)	0.012	175	O
DPAK(L)-(1)/ (S)	HAF1004(L)/(S)	-60	-5	0.34	0.2	175	O
	HAF2007(L)/(S)	60	5	0.12	0.075	175	O
FP-8DA	HAF1010RJ	-60	-5	0.34	0.2	175	O♦
	HAF2015RJ	60	2	(0.2)	0.16	175	O♦
	HAF2026RJ	60	(0.6)	(0.3)	0.21	175	O♦

■ Dr MOS (Integrated Driver - 2MOS FET)

Package	Part No.	Vin (V)	Vout (V)	Iout (A)	f (Hz)	Status
QFN-56	R2J20601NP	7.9 - 16	0.8 - 3.3	35	- 1M	OA
	R2J20602NP	7.4 - 16	0.8 - 3.3	40	- 2M	OA

■ POL-SiP (Integrated PWM Controller - 2MOS FET)

Package	Part No.	Vin (V)	Vout (V)	Iout (A)	f (Hz)	Status
QFN-56	R2J20701NP	7.25 - 16	0.8 - 5.0	35	- 1M	OA

■ PC/ Battery

Package	Part No.	Ratings		Characteristics			Status
				R_{DS}(on) (Ω) max			
		V_{DSS} (V)	I_D (A)	4 V (4.5 V)	10 V (2.5 V) [1.5 V]	Ciss (pF) typ	
FP-8DA (JEDEC: SOP-8)	HAT1132R	-30	-7	(0.04)	0.025	930	O♦A
	HAT1131R	-30	-9	(0.031)	0.019	1350	O♦A
	HAT1130R	-30	-10	(0.022)	0.014	1750	O♦A
	HAT1129R	-30	-12	(0.018)	0.0105	2400	O♦A
	HAT1128R	-30	-18	(0.0115)	0.0075	4500	O♦A
LFPAK	HAT1139H [D] (1chip)	-30	-30	(0.0145)	0.009	3200	O♦A
	HAT1127H	-30	-40	(0.0086)	0.0045	6200	O♦A
	HAT1125H	-30	-45	(0.0059)	0.0036	7000	O♦A

Notes) O: In Mass Production
SPL: Samples are available
Δ: Long delivery date(Lead time: 3 months)
A: Promoted
B: Not recommend for new design
♦: Large order only (Unit: Refer to packing unit (P.19))
OS: Overseas sales only
[D]: Dual chips included

IGBT

■ Strobe flashers

Package	Part No.	Ratings VCES (V)	Ratings ICP (A)	Ratings Drive (V)	Status
FP-8DA (JEDEC: SOP-8)	CY20AAJ-8	400	130	4	O♦B
	CY20AAJ-8F	400	130	4	O♦B
	CY20AAJ-8H	400	130	4	O♦
	CY25AAJ-8	400	150	4	O♦B
	CY25AAJ-8F	400	150	4	O♦

Package	Part No.	Ratings VCES (V)	Ratings ICP (A)	Ratings Drive (V)	Status
TTP-8DV (TSSOP-8)	CY25BAH-8F	400	150	2.5	O♦B
	CY25BAJ-8F	400	150	4	O♦B
	RJP4002ASA	400	150	2.5	O♦A
	RJP4003ASA	400	150	4	O♦A
TO-220FN	CT40KM-8H	400	200	30	O
VSON-8	CY25CAH-8F	400	150	2.5	O♦B
	CY25CAJ-8F	400	150	4	O♦B
	RJP4002ANS	400	150	2.5	O♦A
	RJP4003ANS	400	150	4	O♦A

■ Igniter

Package	Part No.	Ratings VCES (V)	Ratings IC (A)	Characteristics VCE(sat) (V) typ	Characteristics tf (µs) typ	Status
DPAK(S)	GN4008ZB4	400	8	1.5	5	SPL ♦A
LDPAK(S)	GN4014ZB4	400	14	1.6	5	O♦A

■ Plasma Display Panel

Package	Part No.	Ratings VCES (V)	Ratings IC (A)	Ratings IC(Peak) (A)	Characteristics VCE(sat) (V) typ	Characteristics tf (µs) typ	Status
TO-220AB	RJP3054DPN	300	35	140	1.8	0.12	ΔA
	RJP3064DPN	320	35	180	1.5	0.3	ΔA
	RJP3065DPN	320	40	200	1.5	0.3	ΔA
	RJP6065DPN	630	40	200	1.8	0.45	ΔA
TO-220FN	RJP3053DPP	300	30	120	2.0	0.12	OA
	RJP3054DPP	300	35	140	1.8	0.12	ΔA
	RJP3055DPP	300	40	160	1.8	0.15	ΔA
	RJP3056DPP	300	45	180	1.6	0.15	ΔA
	RJP3063DPP	320	30	160	1.7	0.3	OA
	RJP3064DPP	320	35	180	1.5	0.3	OA
	RJP3065DPP	320	40	200	1.5	0.3	OA
	RJP3042DPP	330	25	120	2	0.15	OA
	RJP3046DPP	330	45	230	1.5	0.15	ΔA
	RJP4065DPP	400	40	200	1.6	0.3	OA
	RJP6045DPP	630	40	200	2.3	0.15	ΔA
	RJP6055DPP	630	40	160	2.3	0.15	OA
	RJP6065DPP	630	40	200	1.8	0.45	OA
	RJP6047DPP	630	50	250	2.2	0.15	ΔA

Package	Part No.	Ratings VCES (V)	Ratings IC (A)	Ratings IC(Peak) (A)	Characteristics VCE(sat) (V) typ	Characteristics tf (µs) typ	Status
TO-220 CFM	RJP3063DPP-C0	320	30	160	1.7	0.3	OA
	RJP4065DPP-C0	430	40	200	1.6	0.3	OA
TO-3P	RJP2557DPK	270	50	200	1.6	0.15	OA
	RJP3056DPK	300	45	180	1.6	0.15	ΔA
	RJP3057DPK	300	50	200	1.6	0.15	OA
	RJP3066DPK	320	45	215	1.4	0.3	ΔA
	RJP3067DPK	320	50	230	1.4	0.3	ΔA
	RJP3069	320	65	300	1.3	0.3	ΔA
	RJP3060DPK	320	75	350	1.3	0.3	ΔA
	RJP3047DPK	330	50	250	1.5	0.15	OA
	RJP3049	330	65	330	1.4	0.15	ΔA
	RJP4067DPK	430	50	230	1.5	0.35	ΔA

■ Plasma Display Panel (Build in Diode)

Package	Part No.	Ratings VCES (V)	Ratings IC (A)	Ratings IC(Peak) (A)	Characteristics VCE(sat) (V) typ	Characteristics tf (µs) typ	Characteristics trr (µs) typ	Status
TO-3P (Co-pack)	RJH3077DPK	330	50	200	1.6	0.16	0.1	OA
	RJH3047DPK	330	50	250	1.5	0.15	0.06	OA

■ High Speed Switching (Active filter)

Package	Part No.	Ratings VCES (V)	Ratings IC (A)	Characteristics VCE(sat) (V) typ	Characteristics tf (µs) typ	Status
LDPAK(S)	RJP6003DPE	600	20	1.7	0.15	Δ♦A
TO-220CFM	GN6030V5CF	600	30	1.7	0.12	OA

Note) As for the IGBT Driver IC for the strobe flashers, refer to the " Multi-Purpose ASSP " section of the Renesas Strobe Circuit Devices (RJJ01D0009-0200) and the Renesas general-purpose Logic ICs Status List (RJJ16D0001-1900).

Triacs

■ General Switching

Package	Part No.	Ratings Tj (°C)	V_{DRM} (V)	I_T(RMS) (A)	I_{TSM} (A)	Characteristics I_{GT}(max) (mA)	Status
TO-92*	BCR08AM-12	125	600	0.8	8	(II, III) 5	OA
	BCR1AM-12	125	600	1	10	5	O
	BCR1AM-12A	125	600	1	10	7	OA
	BCR08AM-14	125	700	0.8	8	5	OA
MP-3A	BCR3AS-12(A)	125	600	3	30	15	OA
	BCR3AS-12(B)	150	600	3	30	15	OA
	BCR5AS-12(A)	125	600	5	50	30	OA
	BCR5AS-12(B)	150	600	5	50	30	OA
	BCR5AS-14(A)	125	700	5	50	30	SPL
DPAK(L)-(3)	BCR3AS-12(A)	125	600	3	30	15	O
	BCR5AS-12(A)	125	600	5	50	30	O
UPAK / (SOT-89)**	BCR08AS-12	125	600	0.8	8	5	O
TO-220	BCR5AM-12L(A)	125	600	5	50	20	OA
	BCR5AM-12L(B)	150	600	5	50	20	OA
	BCR6AM-12L(A)	125	600	6	60	30	OA
	BCR6AM-12L(B)	150	600	6	60	30	OA
	BCR8CM-12L(A)	125	600	8	80	30	OA
	BCR8CM-12L(B)	150	600	8	80	30	OA
	BCR10CM-12L(A)	125	600	10	100	30	OA
	BCR10CM-12L(B)	150	600	10	100	30	OA
	BCR12CM-12L(A)	125	600	12	120	30	OA
	BCR12CM-12L(B)	150	600	12	120	30	OA
	BCR16CM-12L(A)	125	600	16	170	30	OA
	BCR16CM-12L(B)	150	600	16	170	30	OA
	BCR20AM-12L(A)	125	600	20	200	30	OA
	BCR20AM-12L(B)	150	600	20	200	30	OA
TO-220F (2)	BCR2PM-12RE	150	600	2	10	(II, III) 10	OA
	BCR2PM-14LE	150	600	2	10	(II, III) 10	OSPL
TO-220F (1)	BCR3PM-12L(A)	125	600	3	30	20	O
	BCR3PM-12L(B)	150	600	3	30	20	O
	BCR3PM-12LG	150	600	3	30	20	OA
	BCR3PM-14LG	125/150	800/700	3	30	30	OA
	BCR5PM-12L(A)	125	600	5	50	20	O
	BCR5PM-12L(B)	150	600	5	50	20	O
	BCR5PM-12LG	150	600	5	50	20	OA
	BCR5PM-14L(A)	125	700	5	50	30	O
	BCR5PM-14LD	150	700	5	30	50	OB
	BCR5PM-14LG	125/150	800/700	5	50	30	OA
	BCR8PM-12L(A)	125	600	8	80	30	O
	BCR8PM-12L(B)	150	600	8	80	30	O
	BCR8PM-12LD	150	600	8	48	50	OB
	BCR8PM-12LG	150	600	8	80	30	OA
	BCR8PM-14L(A)	125	700	8	80	30	O
	BCR8PM-14LD	150	700	8	48	50	OB
	BCR8PM-14LG	125/150	800/700	8	80	30	OA
	BCR8PM-16L(A)	125	800	8	80	30	O
	BCR8PM-16LG	150	800	8	80	30	OA
	BCR10PM-12L(A)	125	600	10	100	30	O
	BCR10PM-12L(B)	150	600	10	100	30	O
	BCR10PM-12LD	150	600	10	60	50	OB
	BCR10PM-12LG	150	600	10	100	30	OA
TO-220F (1)	BCR12PM-12L(A)	125	600	12	120	30	O
	BCR12PM-12L(B)	150	600	12	120	30	O
	BCR12PM-12LD	150	600	12	72	50	SPL B
	BCR12PM-12LG	150	600	12	120	30	OA
	BCR12PM-14L(A)	125	700	12	120	30	O
	BCR12PM-14LG	150	700	12	120	30	OA
	BCR16PM-12L(A)	125	600	16	160	30	O
	BCR16PM-12L(B)	150	600	16	160	30	O
	BCR16PM-12LD	150	600	16	96	50	OB
	BCR16PM-12LG	150	600	16	160	30	OA
TO-220FN	BCR3KM-12(RA)	125	600	3	30	15	O
	BCR3KM-12(RB)	150	600	3	30	15	O
	BCR3KM-12LA	125	600	3	30	20	O
	BCR3KM-12LB	150	600	3	30	20	O
	BCR3KM-14L	125	700	3	30	30	O
	BCR5KM-12(RA)	125	600	5	50	15	O
	BCR5KM-12(RB)	150	600	5	50	15	O
	BCR5KM-12LA	125	600	5	50	20	O
	BCR5KM-12LB	150	600	5	50	20	O
	BCR5KM-14LA	125	700	5	50	30	O
	BCR5KM-14LC	150	700	5	30	50	ΔB
	BCR8KM-12LA	125	600	8	80	30	O
	BCR8KM-12LB	150	600	8	80	30	O
	BCR8KM-12LC	150	600	8	48	50	ΔB
	BCR8KM-14LA	125	700	8	80	30	O
	BCR8KM-14LC	150	700	8	48	50	ΔB
	BCR8KM-16LA	125	800	8	80	30	O
	BCR8KM-20LA	125	1000	8	80	30	Δ
	BCR10KM-12LA	125	600	10	100	30	O
	BCR10KM-12LB	150	600	10	100	30	O
	BCR10KM-12LC	150	600	10	60	50	ΔB
	BCR12KM-12LA	125	600	12	120	30	O
	BCR12KM-12LB	150	600	12	120	30	O
	BCR12KM-14LA	125	700	12	120	30	O
	BCR16KM-12LA	125	600	16	160	30	O
	BCR16KM-12LB	150	600	16	160	30	O
	BCR16KM-12LC	150	600	16	96	50	ΔB
	BCR20KM-12L(A)	125	600	20	200	30	O
	BCR20KM-12L(B)	150	600	20	200	30	O
	BCR25KM-12LA	125	600	25	250	30	SPL
	BCR25KM-12LB	150	600	25	250	30	SPL
	BCR30KM-8LA	125	400	30	300	30	SPL
	BCR30KM-8LB	150	400	30	300	30	SPL
TO-220S	BCR8CS-12L(A)	125	600	8	80	30	O
	BCR8CS-12L(B)	150	600	8	80	30	O
	BCR10CS-12L(A)	125	600	10	100	30	O
	BCR10CS-12L(B)	150	600	10	100	30	O
	BCR12CS-12L(A)	125	600	12	120	30	O
	BCR12CS-12L(B)	150	600	12	120	30	O
	BCR16CS-12L(A)	125	600	16	170	30	O
	BCR16CS-12L(B)	150	600	16	170	30	O
TO-3P*	BCR30AM-12L(A)	125	600	30	300	50	O
	BCR30AM-12L(B)	150	600	30	300	50	O
TO-3PFM	BCR20RM-30LA	125	1500	20	200	50	OA

[Trigger mode]
I: G^+, $T2^+$
II: G^-, $T2^+$
III: G^-, $T2^-$
IV: G^+, $T2^-$

Thyristors

■ General Switching

Package	Part No.	Ratings Tj (°C)	V_{DRM} (V)	I_T(AV) (A)	I_{TSM} (A)	Characteristics I_{GT}(max) (mA)	Status
MP-3A	CR5AS-12	125	600	5	90	0.1	OA
DPAK(L)-(3)	CR5AS-12	125	600	5	90	0.1	OA
MPAK/ (SC-59)**	CR05BS-8	125	400	0.1	10	0.1	O
UPAK/ (SOT-89)**	CR05AS-8	125	400	0.5	10	0.1	O
	CR08AS-12	125	600	0.8	10	0.1	O
TO-220	CR6CM-12A	125	600	6	90	10	SPL A
	CR8CM-12A	125	600	8	120	15	SPL A
	CR12CM-12A	125	600	12	360	30	OA
TO-220F (1)	CR3PM-12	125	600	3	70	0.1	OA
	CR6PM-12A	125	600	6	90	10	OA
	CR8PM-12A	125	600	8	120	15	OA
	CR12PM-12A	125	600	12	360	30	SPL A
TO-92*/ TO-92(3)	CR02AM-8	125	400	0.3	10	0.1	OA
	CR03AM-12	110	600	0.3	20	0.1	O
	CR05AM-12	110	600	0.3	10	0.1	OA
	CR04AM-12	110	600	0.4	10	0.1	OA
	CR05BM-12	125	600	0.5	8	0.1	A
	CR03AM-16	110	800	0.3	20	0.1	O
	CR05AM-16	110	800	0.3	10	0.1	OA
TO-220FN	CR3KM-12	125	600	3	70	0.1	O
	CR6KM-12A	125	600	6	90	10	O
	CR8KM-12A	125	600	8	120	15	O

Notes) O: In Mass Production
SPL: Samples are available
Δ: Long delivery date(Lead time: 3 months)
A: Promoted
B: Not recommend for new design
♦: Large order only (Unit: Refer to packing unit (P.19))
OS: Overseas sales only
**: To be discontinued package

Standard Packaging Specifications

■ Shipping Quantitiy Per One Packing Unit

Package	Name Note	Packing Unit
TO-92 TO-92 MOD	Part No. + Grade + TZ	2500 Pcs/ Box
MPAK MPAK-4 CMPAK	Part No. + Marking + TL/TR	3000 Pcs/ Reel
CMPAK-4 CMPAK-6 MPAK-5	Part No. + Marking + UL/UR	12000 Pcs/ Reel
MFPAK	Part No. + Marking + TL/TR	9000 Pcs/ Reel
MFPAK-4	Part No. + Marking + TL/TR	10000 Pcs/ Reel
TSOP-6 CMFPAK-6	Part No. + EL	3000 Pcs/ Taping
TSSOP-14 (High frequency linear IC)	Part No. + EL	1000 Pcs/ Taping
FP-8DA (JEDEC: SOP-8)	Part No. + EL	2500 Pcs/ Taping
TNP-6DTV TNP-8TV	Part No. + TL/TR	3000 Pcs/ Reel
WSON0303-2 WSON0303-6	Part No. + TL/TR	2000 Pcs/ Reel
WSON0504-2	Part No. + TF/TB	2000 Pcs/ Reel

Package	Name Note	Packing Unit
LFPAK	Part No. + EL	2500 Pcs/ Taping
TTP-8DV (TSSOP-8)	Part No. + EL	3000 Pcs/ Taping
DPAK (S)	Part No. + TL/TR	3000 Pcs/ Taping
LDPAK (S)-(1) LDPAK (S)-(2)	Part No. + TL/TR	1000 Pcs/ Taping
UPAK	Part No. + Marking + TL/TR	1000 Pcs/ Reel
	Part No. + Marking + UL/UR	4000 Pcs/ Reel
RP-8P	Part No. + Marking + TB	1000 Pcs/ Reel
	Part No. + Marking + UB	4000 Pcs/ Reel
FP-11DTV (HSOP-11)	Part No. + EL	2500 Pcs/ Taping
WPAK	Part No. + EL	2500 Pcs/ Taping
LFPAK-i	Part No. + EL	2500 Pcs/ Taping

Note1) Lead (Pb) free: + "–E"
Note2) New product of DPAK(S), LDPAK(S)-(1) and LDPAK(S)-(2) is "TL" only.

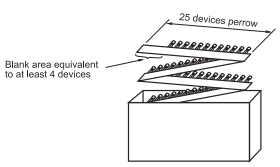
Package	Name Note	Packing Unit
TO-92*	Part No. + TB	2000 Pcs/ Box
SC-59 (To be discontinued)	Part No. + T1/T2	3000 Pcs/ Reel
SOT-89 (To be discontinued)	Part No. + T1/T2	3000 Pcs/ Reel 1000 Pcs/ Reel
MP-3A	Part No. + T1/T2	3000 Pcs/ Reel
MP-3A (RJ part number)	Part No. + EL	3000 Pcs/ Reel

Package	Name Note	Packing Unit
TO-220S	Part No. + T1/T2	1000 Pcs/ Real

Package	Name Note	Packing Unit
DPAK(L)	Part No.	3200 Pcs/ Box (sack)
LDPAK(L)	Part No.	500 Pcs/ Box (sack)
TO-220AB	Part No.	500 Pcs/ Box (sack)
TO-220FM	Part No.	500 Pcs/ Box (sack)
TO-220CFM	Part No.	600 Pcs/ Box (Tube)
TO-3P	Part No.	360 Pcs/ Box (Tube)
TO-3PFM	Part No.	360 Pcs/ Box (Tube)
TO-3PL	Part No.	500 Pcs/ Box (Case)

Standard Taping Specifications

Designation	Part No.	+	TZ

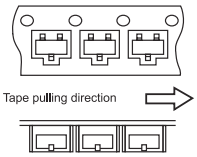


Package	Packing Unit
TO-92 TO-92 MOD	Zigzag Box 2,500 Pcs/ Box
SPAK	Zigzag Box 2,500 Pcs/ Box

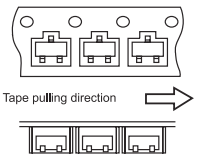
"R" of TR and UR is applied to those items which are packed face up with the marking surface positioned in the
direction in which the tape can be pulled out so that the center terminal of CMPAK turns on the right side.

CMPAK / MPAK standard taping and packing specifications (Comform to JEITA standard RC-1009A)

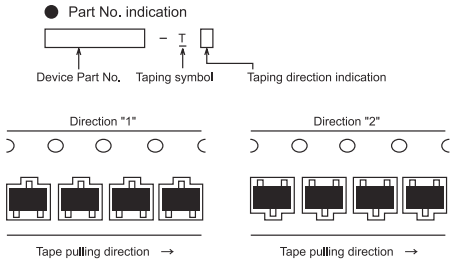
Designation	Part No. + Mark + TR	3000 Pcs/ Reel
	Part No. + Mark + UR	12000 Pcs/ Reel



Designation	Part No. + Mark + TL	3000 Pcs/ Reel
	Part No. + Mark + UL	12000 Pcs/ Reel

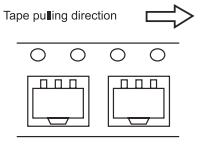


SC-59 (Packing Unit: 3000 Pcs/ Reel)

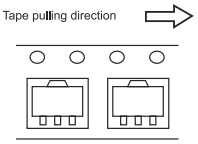


UPAK taping and packing specifications (Comform to JEITA standard RC-1009A)

Designation	Part No. + Mark + TR	1000 Pcs/ Reel
	Part No. + Mark + UR	4000 Pcs/ Reel

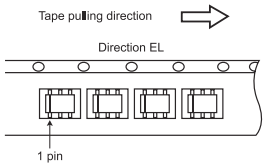


Designation	Part No. + Mark + TL	1000 Pcs/ Reel
	Part No. + Mark + UL	4000 Pcs/ Reel



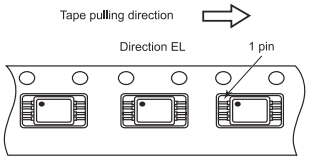
TSOP-6 taping and packing specifications

Designation	Part No. + EL	3000 Pcs/ Reel



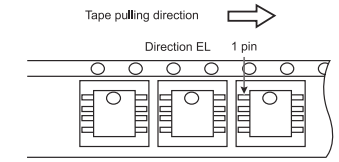
TSSOP-8 taping and packing specifications
(Comform to JIS standard C0806)

Designation	Part No. + EL	3000 Pcs/ Reel

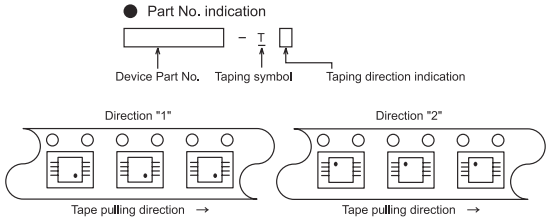


SOP-8 taping and packing specifications
(Comform to JIS standard C0806)

Designation	Part No. + EL	2500 Pcs/ Reel

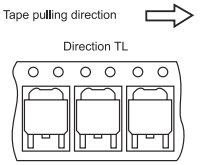


TSSOP-8 / SOP-8 (Packing Unit: 3000 Pcs/ Reel)

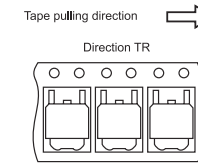


DPAK / LDPAK taping and packing specifications (Comform to JEITA standard RC-1009B)

Designation	Part No. + TL	DPAK: 3000 Pcs/ Reel LDPAK: 1000 Pcs/ Reel

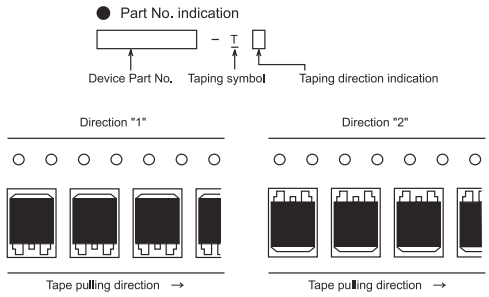


Designation	Part No. + TR	DPAK: 3000 Pcs/ Reel LDPAK: 1000 Pcs/ Reel



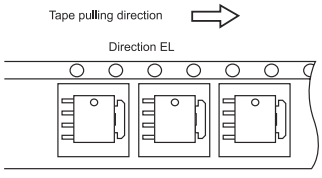
TL is the standard spec. For TR, we will support individually if there is any request.

TO-220S (Packing Unit: 1000 Pcs/ Reel)



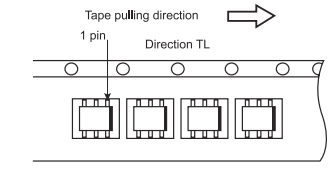
LFPAK taping and packing specifications

Designation	Part No. + EL	2500 Pcs/ Reel

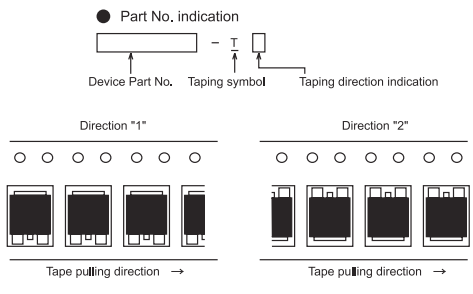


CMPAK-6 taping and packing specifications

Designation	Part No. + TL(CMPAK-6)	3000 Pcs/ Reel
	Part No. + EL(CMFPAK-6)	



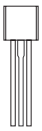
MP-3 (Packing Unit: 3000 Pcs/ Reel)



Package

Package Name
Package Code

TO-92*
PRSS0003EA-A



5.0 x 17.5
(5.0 x 5.0)

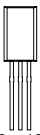
TO-92(1)
PRSS0003DA-A/
PRSS0003DB-A

4.8 x 17.7
(4.8 x 5.0)

TO-92(2)
PRSS0003DA-C/
PRSS0003DB-C

4.8 x 17.7
(4.8 x 5.0)

TO-92MOD
(JEITA: SC-51)
PRSS0003DC-A



4.8 x 18.1
(4.8 x 8.0)

MFPAK
(1408 flat)
PUSF0003ZA-A

1.4 x 1.2
(1.4 x 0.8)

MFPAK-4
PUSF0004ZA-A

1.4 x 1.2
(1.4 x 0.8)

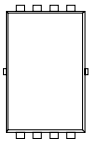
TNP-6DTV
(HWSON-6)
PWSN0006JA-A

2.0 x 2.0
(2.0 x 2.0)

TNP-8TV
(HWQFN-8)
PWQN0008ZA-A

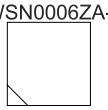
2.0 x 2.0
(2.0 x 2.0)

VSON-8
PVSN0008JA-A



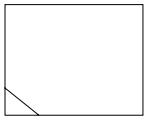
3.0 x 4.8
(3.0 x 4.4)

WSON0303-2
WSON0303-6
PWSN0002ZA-A
PWSN0006ZA-A



3.0 x 3.0
(3.0 x 3.0)

WSON0504-2
PWSN0002ZA-B



5.0 x 4.0
(5.0 x 4.0)

CMPAK
(JEITA: SC-70)
PTSP0003ZA-A

2.0 x 2.1
(2.0 x 1.25)

CMPAK-4
(JEITA: SC-82AB)
PTSP0004ZA-A

2.0 x 2.1
(2.0 x 1.25)

CMPAK-6
PTSP0006JA-A

2.0 x 2.1
(2.0 x 1.25)

CMFPAK-6
PWSF0006JA-A

2.0 x 2.1
(2.0 x 1.7)

SC-59
PLSP0003ZA-A

2.9 x 2.5
(2.9 x 1.5)

MPAK
(JEITA: SC-59A)
PLSP0003ZB-A

2.95 x 2.8
(2.95 x 1.5)

MPAK-4
(JEITA: SC-61AA)
PLSP0004ZA-A

2.95 x 2.8
(2.95 x 1.5)

TSOP-6
PTSP0006FA-A

2.95 x 2.8
(2.95 x 1.6)

UPAK
PLZZ0004CA-A

4.5 x 4.25
(4.5 x 2.5)

SOT-89
PLZZ0004CB-A

4.6 x 4.2
(4.6 x 2.5)

TTP-8DV
(TSSOP-8)
PTSP0008JB-B

3.0 x 6.4
(3.0 x 4.4)

FP-8DA
(JEDEC: SOP-8)
PRSP0008DD-A

4.9 x 6.1
(4.9 x 3.95)

LFPAK
PTZZ0005DA-A

4.9 x 6.1
(4.9 x 3.95)

LFPAK-i
PTSP0008DC-A

4.9 x 6.1
(4.9 x 3.95)

WPAK
PWSN0008DA-A

5.3 x 6.1
(5.3 x 5.6)

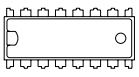
TNP-56TV
(QFN56)
-

8.0 x 8.0
(8.0 x 8.0)

FP-11DTV
(HSOP-11)
PRSP0014DE-B

8.65 x 6.1
(8.65 x 3.95)

16P4
(DIP-16)
PRDP0016AA-A



7.62 x 19
(6.3 x 19)

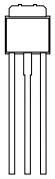
MP-3A
PRSS0004ZA-A

6.5 x 10
(6.5 x 7)

DPAK(S)
PRSS0004ZD-C

6.5 x 9.5
(6.5 x 7)

DPAK(L)-(1)
PRSS0004ZD-A

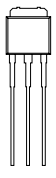


6.5 x 23.4
(6.5 x 7.2)

DPAK(L)-(2)
PRSS0004ZD-B

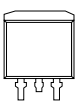
6.5 x 23.4
(6.5 x 7.2)

DPAK(L)-(3)
PRSS0004ZD-D



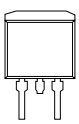
6.5 x 23.1
(6.5 x 7.2)

LDPAK(S)-(1)
PRSS0004AE-B



10.2 x 13.0
(10.2 x 10)

LDPAK(S)-(2)
PRSS0004AE-C

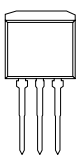


10.5 x 12.8
(10.5 x 10)

TO-220S
PRSS0004AB-A

10.5 x 12.8
(10.5 x 10)

LDPAK(L)
PRSS0004AE-A

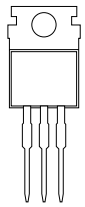
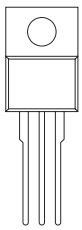
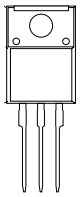
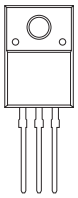
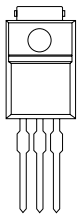
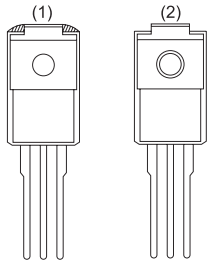


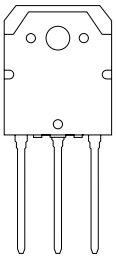
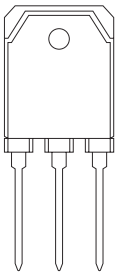
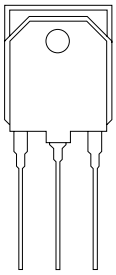
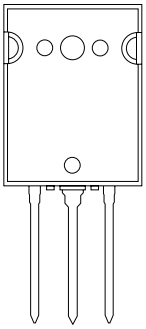
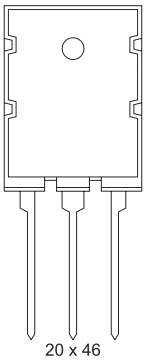
10.2 x 22.6
(10.2 x 10)

Note) 1. These packages are not in full size.
2. Unit is mm, and those values are for reference
(values of external dimensions including pins).
Dimensions in ( ) are body dimensions.
3. For details, refer to the catalog.

Package

Package Name
Package Code

TO-220AB PRSS0004AC-A	TO-220 PRSS0004AA-A	TO-220C.FM PRSS0003AE-A	TO-220FN PRSS0003AB-A	TO-220FM PRSS0003AD-A	TO-220F PRSS0003AA-A
					
11.5 x 29 (11.5 x 15)	10.5 x 28.5 (10.5 x 15)	10 x 28.6 (10 x 15)	10 x 29 (10 x 15)	10 x 31 (10 x 17)	10.5 x 30.5 (10.5 x 17) 10.5 x 30.5 (10.5 x 17)

TO-3P PRSS0004ZE-A	TO-3P* PRSS0004ZB-A	TO-3PFM PRSS0003ZA-A	TO-3PL PRSS0004ZF-A	TO-3PL* PRSS0004ZC-A
				
15.6 x 37.9 (15.6 x 19.9)	15.9 x 39.5 (15.9 x 19.9)	15.6 x 40.9 (15.6 x 19.9)	20 x 46 (20 x 26)	20 x 46 (20 x 26)

RF POWER TRANSISTOR

RP8P PLSS0003ZA-A

5.2 x 5.6 (5.2 x 3.4)

Note) 1. These packages are not in full size.
2. Unit is mm, and those values are for reference (values of external dimensions including pins). Dimensions in ( ) are body dimensions.
3. For details, refer to the catalog.

Surface Mount Type Marking

■MPAK

Part No.	Marking
2SA1052	MC, MD
2SA1121	SC, SD
2SA1122	CC, CD
2SA1566	JID, JIE
2SB831	BC
2SB1691	WL-
2SC2462	LB, LC, LD
2SC2463	DE
2SC2618	RC, RD
2SC2620	QB, QC
2SC2734	GC
2SC2735	JC
2SC3127	ID-
2SC4050	KID, KIE
2SC4197	TI-
2SC4702	XV-
2SC5772	FR-
2SC5773	JR-
2SC5890	FS-
2SC5998	YC-
2SD1306	NE
2SD2655	WM-
2SJ399	ZF-
2SJ451	ZK-
2SJ486	ZU-
2SJ574	BP
2SK360	IGE, IGF
2SK1070	PIC, PID, PIE
2SK2373	ZE-
2SK2569	ZN-
2SK2570	ZL-
2SK2980	ZZ-
2SK3000	ZY-
2SK3287	AN
2SK3288	EN
2SK3290	BN
RQJ0201UGDQA	UG
RQJ0202VGDQA	VG
RQJ0203WGDQA	WG
RQJ0204XGDQA	XG
RQJ0302NGDQA	NG
RQJ0303PGDQA	PG
RQJ0602EGDQA	EG
RQJ0603LGDQA	LG
RQK0201QGDQA	QG
RQK0202RGDQA	RG
RQK0203SGDQA	SG
RQK0204TGDQA	TG
RQK0302GGDQA	GG
RQK0303MGDQA	MG
RQK0603CGDQA	CG
RQK0605JGDQA	JG

■MPAK-4

Part No.	Marking
2SC4926	YD-
2SC5545	ZS-
3SK295	ZQ-
3SK297	ZP-
3SK300	ZR-
3SK319	YB-
3SK323	UG-
BB301M	AW-
BB302M	BW-
BB305M	EW-
BB502M	BS-
BB503M	CS-
BB504M	DS-
BB505M	ES-

■UPAK

Part No.	Marking
2SB1001	BJ
2SB1002	CJ
2SB1025	DJ
2SB1026	DM
2SB1028	EM
2SC3380	AS
2SC4807	ER
2SC4988	FR
2SC5631	JR
2SD1368	CB, CC
2SD1418	DA, DB
2SD1419	DE
2SD1421	ED
2SD1470	AT
2SD1472	CT
2SD1974	ES
2SJ186	CY
2SJ244	JY
2SJ278	MY
2SJ317	NY
2SJ484	WY
2SJ517	YY
2SJ518	AZ
2SK1334	BY
2SK1579	DY
2SK1697	EY
2SK1764	KY
2SK1772	HY
2SK2315	TY
2SK2596	BX
2SK2788	VY
2SK2978	ZY
2SK3391	JX
RQA0004PXDQS	PX
RQA0005QXDQS	QX
RQA0008RXDQS	RX
PQA0009TXDQS	TX
RQJ0301HGDQS	HG
RQJ0601DGDQS	DG
RQJ0602EGDQS	EG
RQK0301FGDQS	FG
RQK0302GGDQS	GG
RQK0601AGDQS	AG
RQK0603CGDQS	CG

■RP8P

Part No.	Marking
2SK2595	AX
2SK3390	IX

■CMPAK

Part No.	Marking
2SC4260	TI-
2SC4261	QI-
2SC4264	GC
2SC4265	JC
2SC4537	IS-
2SC4901	YK-
2SC4965	YV-
2SC5850	LC
2SJ576	AP
2SJ586	CP
2SK1215	IGE, IGF
2SK3289	AN
2SK3348	CN
2SK3378	EN

■CMPAK-4

Part No.	Marking
2SC5081	ZD-
2SC5594	XP-
2SC5624	VH-
2SC5820	WU-
3SK296	ZQ-
3SK298	ZP-
3SK317	ZR-
3SK318	YB-
3SK324	UG-
BB301C	AW-
BB304C	DW-
BB305C	EW-
BB501C	AS-
BB502C	BS-
BB503C	CS-
BB504C	DS-
BB505C	ES-
BB506C	FS-
HSG1001	VD-
HSG1003	VE-
HSG2001	VF-
RQG1001	UP-
RQG1003	UQ-
RQG2001	UR-

■CMPAK-6

Part No.	Marking
TBB1002	BM
TBB1004	DM
TBB1005	EM
TBB1010	KM
TBB1012	MM
TBB1016	RM
RQL1001	JL

■MFPAK

Part No.	Marking
2SC5543	YA-
2SC5555	ZD-
2SC5700	WB-

■MFPAK-4

Part No.	Marking
HSG1002	VE-

■CMFPAK-6

Part No.	Marking
HAT1069C	VY-
HAT1089C	VK-
HAT1090C	VJ-
HAT1091C	VL-
HAT1093C	VM-
HAT1094C	VN-
HAT1095C	VP-
HAT1096C	VQ-
HAT1108C	VZ-
HAT1111C	UA-
HAT1141C	UM-
HAT1146C	US-
HAT1147C	UT-
HAT2196C	VS-
HAT2202C	VR-
HAT2203C	VT-
HAT2204C	VU-
HAT2205C	VV-
HAT2206C	VW-
HAT2207C	VX-
HAT2217C	UB-
HAT2221C	UC-
HAT2240C	UK-
HAT2268C	UN-
HAT2281C	UH-
HAT2282C	UJ-
HAT2286C	UY-
HAT2291C	UU-
HAT2292C	UV-
HAT3042C	UW-
HAT3043C	UX-

■SOT-89 (To be discontinued)

Part No.	Marking
CR05AS-8	**CD (**: Dependent on manufactured date)
CR08AS-12	**AF (**: Dependent on manufactured date)
BCR08AS-12	**BF (**: Dependent on manufactured date)

■SC-59 (To be discontinued)

Part No.	Marking
CR05BS-8	3** (**: Dependent on manufactured date)

■TNP-6DTV

Part No.	Marking
2SC5945	5945

■WSON0303-2

Part No.	Marking
RQA0001DNS	A0001
RQA0003DNS	A0003

■WSON0504-2

Part No.	Marking
RQA0002DNS	RQA0002

Discrete Semiconductor Document

■ Only on the web

	Document Name	Publication Date	Document No.
English	Power MOS FET Application Note	2004.3	REJ05G0001-0200Z

Deleted Type from the List of Previous Versions

Part No.							
2SK1160	2SK1401A	2SK1626	2SK3461(L)/(S)	HSG2002	HSG2004	HSG2005	RJK1526DPP
RQK0607AQDQS	RQK0608BQDQS	RQK2501YGDQA	TBB1017				

Note) Deleted type from the list of previous versions.

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Colophon 7.0