

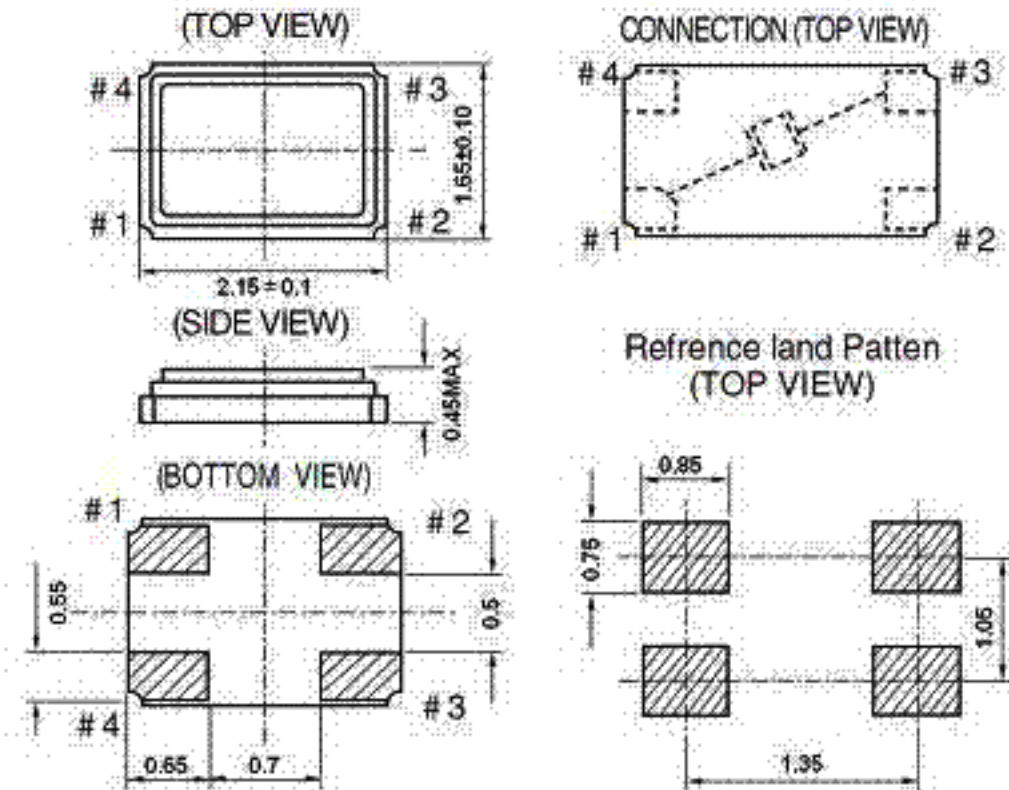
SHOULDER

SMD2016 Crystal

ELECTRICAL SPECIFICATION

Frequency Range	20.000 to 50.000MHz
Load Capacitance	8 pF to 32pF or series
Frequency Tolerance (at 25 °C)	+/-10,+/-15,+/-20,+/-30,+/-50ppm or specify
Oscillation Mode	Fundamental
Frequency Stability in Temperature	+/-10,+/-15,+/-20,+/-30,+/-50ppm or specify
Operating Temperature Range	-20 °C to +70 °C Standard (or Optional)
Storage Temperature Range	-40 °C to +85 °C
Equivalent Series Resistance (ESR)	See ESR Table
Drive Level	10µW Typical, 100µW Max.
Shunt Capacitance	3pF Maximum
Aging (at 25 °C)	±3ppm per year
Insulation Resistance	500 MOhm Minimum

MECHANICAL DIMENSIONS (all in mm)



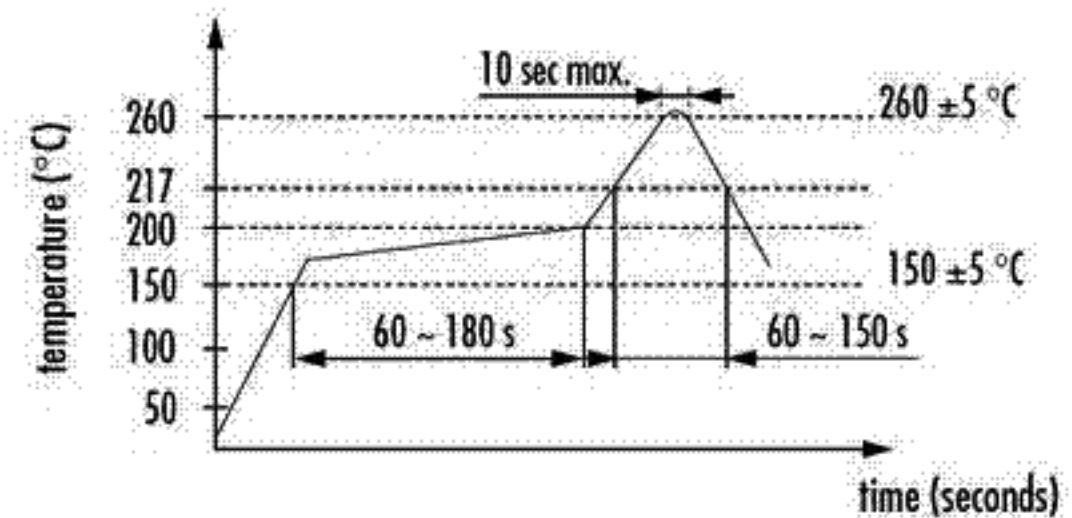
FREQUENCY RANGE AND OSCILLATION MODE

Fundamental (F)	20.000 to 50.000MHz
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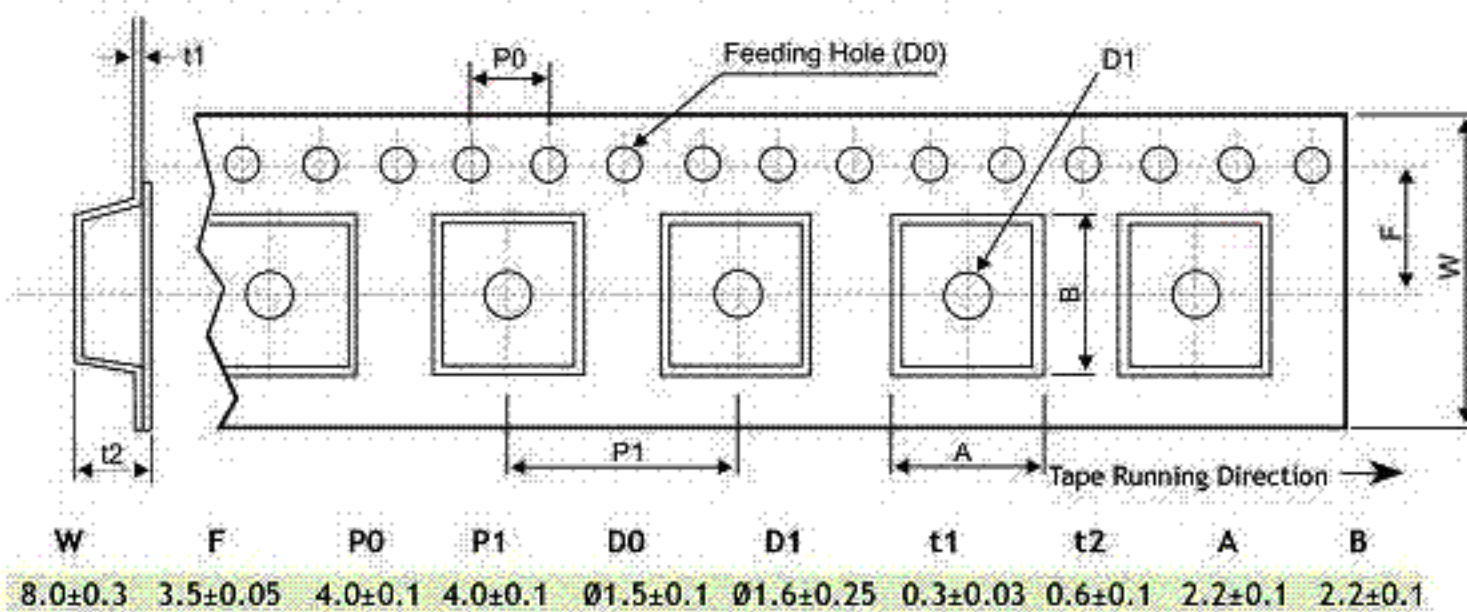
ESR TABLE (Ohms)

20.000 to 26.000MHz	80Max
26.000 to 40.000MHz	60Max
40.000 to 50.000MHz	50Max

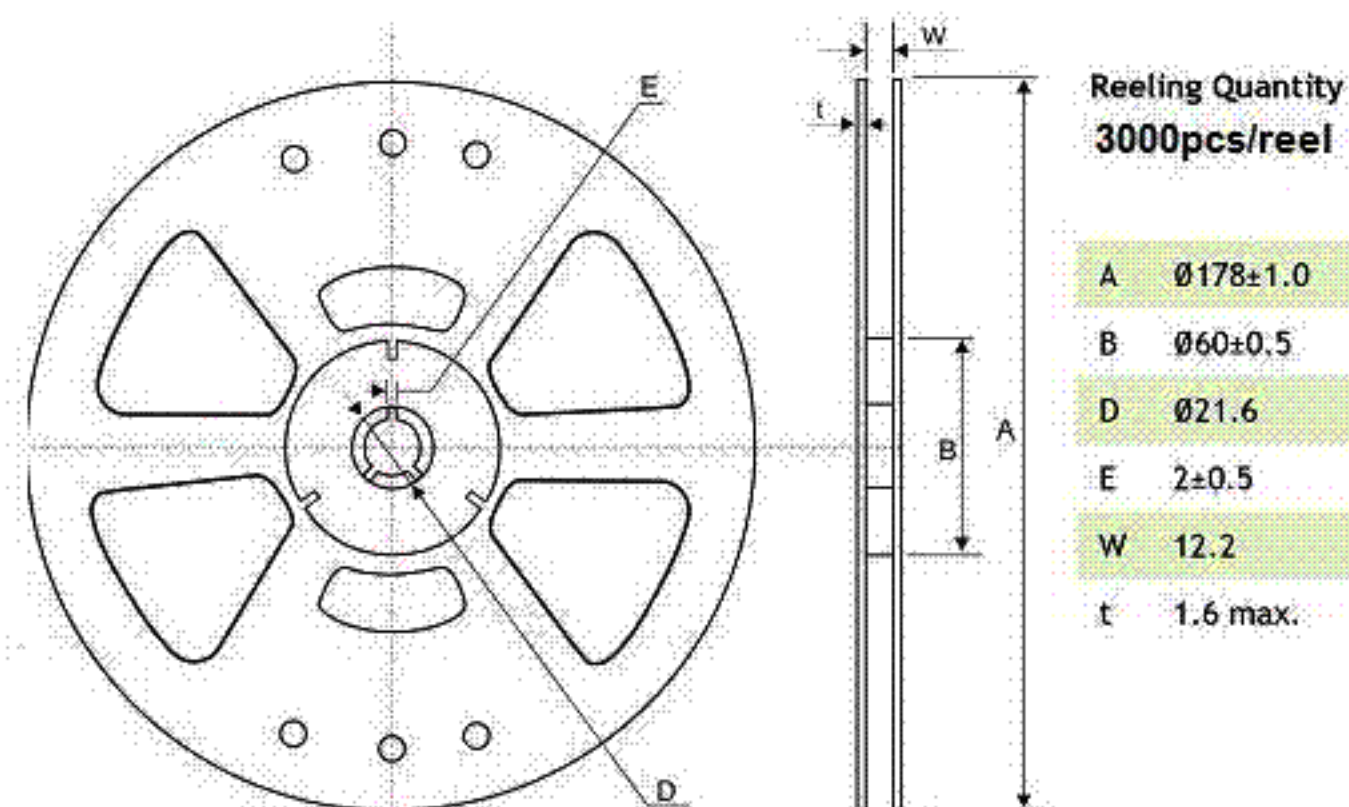
SOLDERING



TAPE SPECIFICATIONS (all in mm) - Carrier Tape Dimensions



Temperature Range	Frequency Stability (ppm)				
	±10ppm	±15ppm	±20ppm	±30ppm	±50ppm
0~+50°C	✓	✓	✓	✓	✓
-10~+60°C	✓	✓	✓	✓	✓
-20~+70°C	✓	✓	✓	✓	✓
-30~+80°C		✓	✓	✓	✓
-40~+85°C			✓	✓	✓



PART NUMBERING SYSTEM (Example)

SMD2016-30.0000-F-20-30-30-A-T

Hold Type

SMD0705 / SMD3225 / SMD1612 / SMD0503 / SMD0603 / SMD2016 / 495-SMD / 4952-SMD

Nominal Frequency (MHz)

Enter the nominal frequency (3 digits after dot) or up to last significant digit different than zero

Mode of Operation (Vibration Mode)

F= Fundamental
T= 3rd Overtone

Load Capacitance

S=Series Resonant
or enter load capacitance
10 to 32 for parallel

Options (can be blank)
S= Standard
X= Additional Specifications
T= Tape and Reel

Operating Temperature Range (°C)

A= -20 °C to 70 °C
B= -10 °C to 60 °C
C= 0 °C to 50 °C
D= -30 °C to 80 °C
E= -40 °C to 85 °C

Frequency Stability (± ppm)

Frequency Tolerance (± ppm)