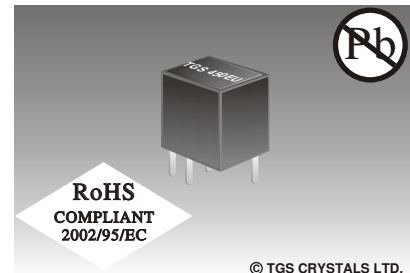


## FEATURES

- Low Cost
- Wide Range of Band Width
- Ultra-small Size 6.5X6.5X6.3mm

## APPLICATIONS

- Telecommunications



© TGS CRYSTALS LTD.

## SPECIFICATION FOR 450KHz \*

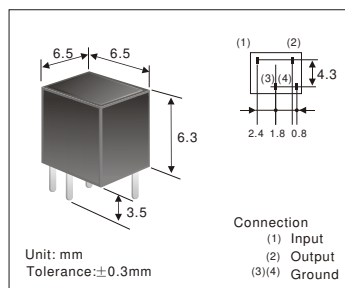
| Characteristics<br>Part Number | Centre Frequency (KHz) | Insertion Loss (dB Max.) | Passband Ripple (dB Max.) | 6dB Bandwidth (KHz)Min | 50dB Bandwidth (KHz)Max | Stop band Att ±100KHz (dB)Min | Input/output Impedance (Ω) |
|--------------------------------|------------------------|--------------------------|---------------------------|------------------------|-------------------------|-------------------------------|----------------------------|
| CFM450BU                       | fo±2.0                 | 4                        | 2                         | ±15.0                  | ±30.0                   | 30                            | 1500                       |
| CFM450CU                       | fo±2.0                 | 4                        | 2                         | ±12.5                  | ±24.0                   | 30                            | 1500                       |
| CFM450DU                       | fo±1.5                 | 4                        | 2                         | ±10.0                  | ±20.0                   | 30                            | 1500                       |
| CFM450EU                       | fo±1.5                 | 6                        | 2                         | ±7.5                   | ±15.0                   | 30                            | 1500                       |
| CFM450FU                       | fo±1.5                 | 4                        | 2                         | ±6.0                   | ±12.5                   | 30                            | 2000                       |
| CFM450GU                       | fo±1.5                 | 6                        | 2                         | ±4.5                   | ±10.0                   | 30                            | 2000                       |
| CFM450HU                       | fo±1.0                 | 6                        | 2                         | ±3.0                   | ±9.0                    | 30                            | 2000                       |
| CFM450IU                       | fo±1.0                 | 6                        | 2                         | ±2.0                   | ±7.5                    | 30                            | 2000                       |
| CFM450HTU                      | fo±1.0                 | 6                        | 2                         | ±3.0                   | ±9.0                    | 35                            | 2000                       |
| CFM450ITU                      | fo±1.0                 | 6                        | 2                         | ±2.0                   | ±7.5                    | 35                            | 2000                       |

## SPECIFICATION FOR 455KHz \*

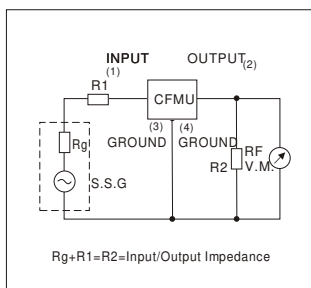
| Characteristics<br>Part Number | Centre Frequency (KHz) | Insertion Loss (dB Max.) | Passband Ripple (dB Max.) | 6dB Bandwidth (KHz)Min | 50dB Bandwidth (KHz)Max | Stop band Att ±100KHz (dB)Min | Input/output Impedance (Ω) |
|--------------------------------|------------------------|--------------------------|---------------------------|------------------------|-------------------------|-------------------------------|----------------------------|
| CFM455BU                       | fo±2.0                 | 4                        | 2                         | ±15.0                  | ±30.0                   | 30                            | 1500                       |
| CFM455CU                       | fo±2.0                 | 4                        | 2                         | ±12.5                  | ±24.0                   | 30                            | 1500                       |
| CFM455DU                       | fo±1.5                 | 4                        | 2                         | ±10.0                  | ±20.0                   | 30                            | 1500                       |
| CFM455EU                       | fo±1.5                 | 6                        | 2                         | ±7.5                   | ±15.0                   | 30                            | 1500                       |
| CFM455FU                       | fo±1.5                 | 4                        | 2                         | ±6.0                   | ±12.5                   | 30                            | 2000                       |
| CFM455GU                       | fo±1.5                 | 6                        | 2                         | ±4.5                   | ±10.0                   | 30                            | 2000                       |
| CFM455HU                       | fo±1.0                 | 6                        | 2                         | ±3.0                   | ±9.0                    | 30                            | 2000                       |
| CFM455IU                       | fo±1.0                 | 6                        | 2                         | ±2.0                   | ±7.5                    | 30                            | 2000                       |
| CFM455HTU                      | fo±1.0                 | 6                        | 2                         | ±3.0                   | ±9.0                    | 35                            | 2000                       |
| CFM455ITU                      | fo±1.0                 | 6                        | 2                         | ±2.0                   | ±7.5                    | 35                            | 2000                       |

\* Specifications Subject to Change Without Notice

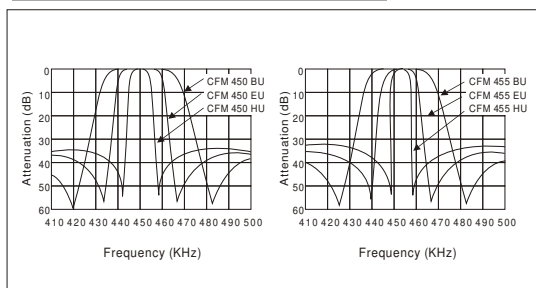
## DIMENSIONS



## TEST CIRCUIT



## FREQUENCY CHARACTERISTICS



## PACKAGE

- Standard package in bulk: 1000 pcs/ box, 10 box/carton

## PART NUMBER GUIDE

|      |                |                |              |       |          |
|------|----------------|----------------|--------------|-------|----------|
| TGS  | CF             | M              | 455          | E     | U        |
| Mark | Ceramic Filter | M:Height-6.3mm | Centre Freq. | Grade | U: 3 Pin |

e.g. Full P/N.: TGS CFM 455E U