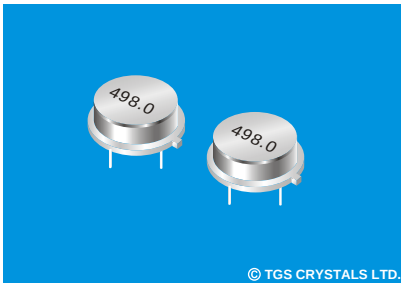
## FEATURES

● The specification is cover the SAW Filter 498.0MHz that is used in CATV system.




## APPLICATIONS

● Communication

## SPECIFICATION ＊

| Parameters | | | Product | Option Code |
|---|---|---|---|---|
| | | | SF | SF |
| Centre Frequency(fc) : | | 498.000MHz | ▲ | 498.000 |
| Temp. Stability | Turnover Temp(To): | 54℃Max. | ▲ | |
| | Turnover Frequency(fo): | fc 498.0 MHz | ▲ | |
| | Frequency Temp. Coefficient (FTC): | 0.032ppm/℃$^2$ | ▲ | |
| Insertion Loss(IL): | | 5.0 dB Max. | ▲ | |
| Operating Temp. Range: | | -10℃~+60℃ | ▲ | |
| Storage Temp. Range: | | -40℃~+85℃ | ▲ | |
| 3 dB Bandwidth($BW_3$): | | 800KHz Max. | ▲ | |
| Pass band Ripple: | | ±1.0dB Max. | ▲ | |
| DC Insulation Resistance between Any Two Pins: | | 1.0MΩ Min. | ▲ | |
| Frequency Aging Absolute Value During the First Year(fA): | | <10ppm/year | ▲ | |
| Rejection | at fc-21.4MHz: | 40dBMin. | ▲ | |
| | at fc-10.7MHz( LO): | 15dB Min. | ▲ | |
| | Ultimate: | 80dB | ▲ | |
| CW Therefore Power Dissipation: | | +10dBm | ▲ | |
| DC Voltage Between Any Two Pins: | | ±30V DC | ▲ | |
| Case Temperature: | | -40℃~+85℃ | ▲ | |
| Reference Temp.: | | TA=25℃ | ▲ | |
| Terminating source impedance: | | Zs=50Ω and matching network | ▲ | |
| Terminating load impedance: | | ZL=50Ω and matching network | ▲ | |
| Holder Type: | | TO-39 | △ | T |
| Package: | | Tube | △ | U |

▲ Standard ＊ Specifications Subject to Change Without Notice
△ Optional: please specify required code when inquiring or ordering

## NOTE

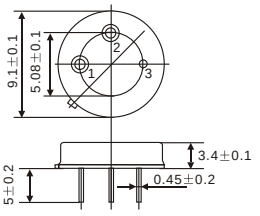
1. Electrostatic Sensitive Device. Observe precautions for handling !
2. Typical test circuit is shown for TO-39 RF filters.
3. Passband and reject bands are specified in reference to fc.
4. All characteristics are specified over the operating temperature and typical aging for 10 years.
5. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture. Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component valuer and quality. Demonstration circuits are available for confirmation of device performance.
6. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
7. The design, manufacturing process, and specifications of this device are subject without notice.
8. The turnover temperature, To, is the temperature of maximum (of turnover) frequency, fo. The nominal frequency at any case temperature, Tc, outside the operating temperature range may be calculated from: f=fo[1-FTC(To-Tc)2].

## PART NUMBER GUIDE

| TGS | SF | 498 | T | U |
|---|---|---|---|---|
| Mark | SAW Filters | Centre Freq. | Holder Type | Package |

**e.g. TGS SF 498.0 T U**

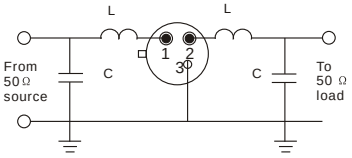
## DIMENSIONS




| Pin | Connection |
|---|---|
| 1 | Input/output |
| 2 | output/Input |
| 3 | Case Ground |

Unit: mm

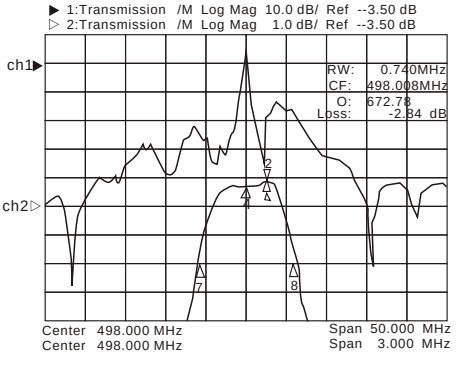
## TEST CIRCUIT




C=6.8pF*
L=3 turns of 0.59mminsulated copper, 3.0mmID

| Pin | Connection |
|---|---|
| 1 | Input/output |
| 2 | output/Input |
| 3 | Case Ground |

## TYPICAL FREQUENCY RESONSE




## PACKAGE

● Standard package in Tube: 20pcs/Tube.