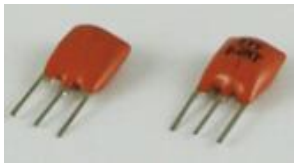
SMD Ceramic Resonator

TGS Part Family No.: CRT

Main Fetaure

- RoHS/RoHS Compliant
- 2 Pins
- Low cost and short lead time



Application

- Microprocessor Systems
- Data Communications

RoHS

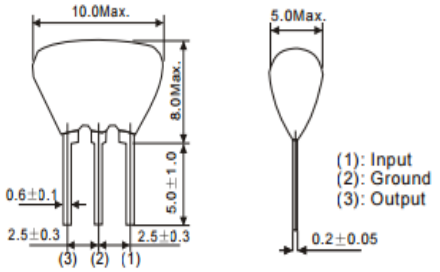
Standard Specification

Frequency Range:2.0000~50.0MHz
Frequency Accuracy At 25℃ :±0.5%
Temp. Stability At -20℃ ~80℃ : ±0.3%
Load Capacitance C1,C2: MG& MT: 30pF
MX: 30pF (12.10~19.99MHz), 15pF (20.00~25.99MHz), 5pF (26.00~50.00MHz)
Operating Temp. Range: -20℃ ~+80℃
Storage Temp. Range:-40℃ ~+85℃
Equivalent Series Resistance (ESR):80Ω Max. (2.000~2.99MHz), 50Ω Max. (3.000~3.49MHz)
30Ω Max. (3.500~8.00MHz), 25Ω Max. (8.010~12.0MHz),
30Ω Max. (12.01~50.0MHz)
Supply Voltage VDD: MG & MX: +5V, MT: +12V
Withstanding Voltage (5Sec Max.):100V DC
Insulation Resistance(Ω):5X10^{-8}Ω (+10V DC)
Aging (Over 10 years): ±0.3ppm
Applicable IC: MG & MT: 1/6CD4069UBE, MX: 1/6TC74HCU04

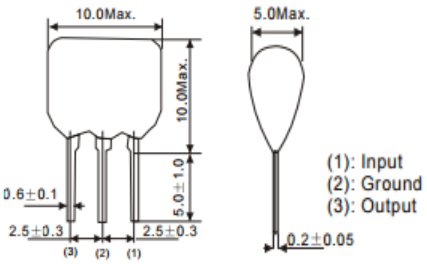
*Specifications Subject to Change Without Notice
**Please specify frequency Range before order/Inquiry

Dimension (Unit: mm)

MG Type



MT & MX Type



TEST CIRCUIT FOR MT ,MT& MX TYPES

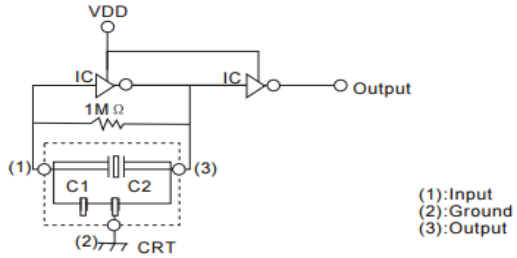


Table 1

Design Mode	Freq. Range	Option Code
Thickness Shear Mode	1.860 ~ 6.00 MHz	G
Thickness Expander Mode	6.010 ~ 13.0 MHz	T
Thickness Expander Mode (3rd Overtone)	13.01 ~ 50.0 Mhz	X

TGS part No. Guide

TGS	CR	T	3.58M	G	B
	1	2	3	4	5

1) CR: Ceramic Resonator 2) T: With built-in Capacitance
3) 3.58M: Freq.Range 4) G: Design Mode (see Table 1) 5) B: Bulk (Package)