



Resonators

With Built-in Capacitor - ZTT Series Ceramic Resonators / 陶瓷谐振器

ZTT series features a built-in load capacitance. This feature eliminates any need for external loading capacitors and reduces component count, increases reliability and reduces size. These unit are offered in the frequency range from 1.79 MHz to 60.00 MHz with an initial frequency tolerance of $\pm 0.5\%$.

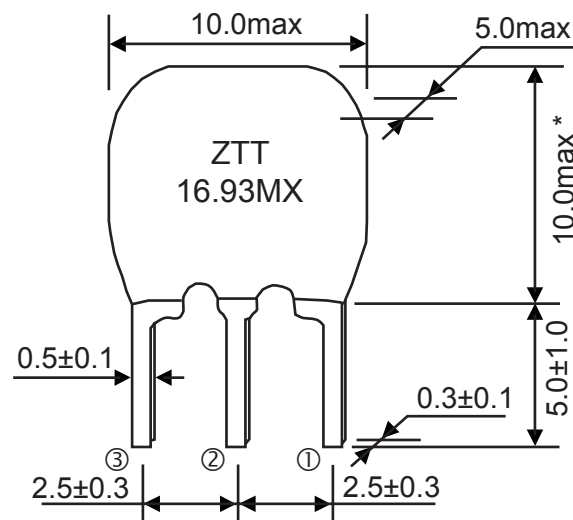
► ZTT With Built-in Capacitor (Compatible to Murata CST)

1.79 - 60.00MHz

Ceramic ZTT (MHz) Resonators Technical Characteristics

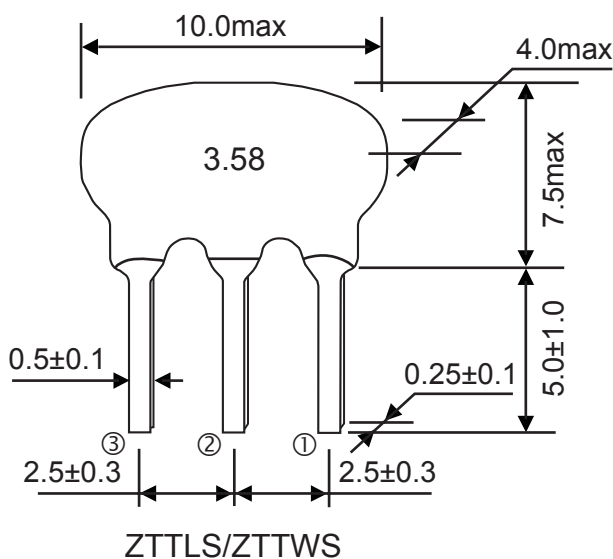
Part Number	Frequency Range (MHz)	Frequency Accuracy (at 25°C) (%)	Stability in Temperature (-20°C ~ +80°C) (%)	Operating Temperature (°C)	Aging For Ten Years (%)
ZTT***MG	1.79 ~ 6.00	± 0.5	± 0.3	-20 ~ +80	± 0.3
ZTWS***MG	1.79 ~ 6.00	± 0.5	± 0.3	-20 ~ +80	± 0.3
ZTTL***MG	3.00 ~ 8.00	± 0.5	± 0.3	-20 ~ +80	± 0.3
ZTTRS***MG	3.00 ~ 10.00	± 0.5	± 0.3	-20 ~ +80	± 0.3
ZTT***MT	6.00 ~ 13.00	± 0.5	± 0.3	-20 ~ +80	± 0.3
ZTT***MX	12.00 ~ 60.00	± 0.5	± 0.3	-20 ~ +80	± 0.3

► Ceramic ZTT Resonator Dimensions (Unit:mm)

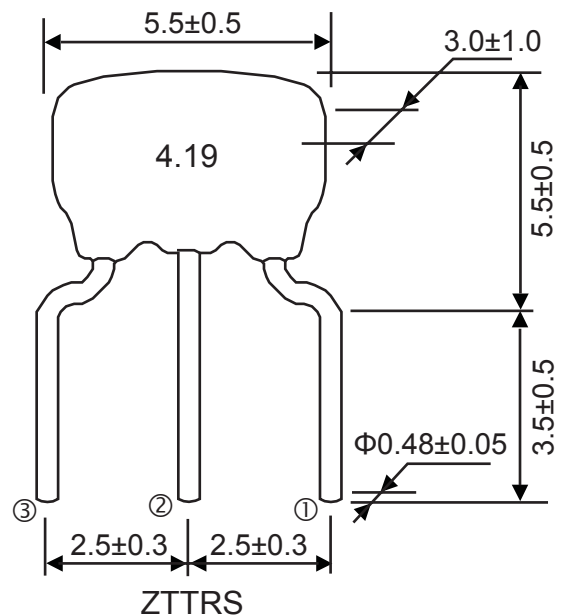


* MG: 8.0max
 MT: 10.0max
 MX: 13.01~60.00MHz, 10.0max
 12.00~13.00MHz, 12.0max

- ① Input
- ② Ground
- ③ Output



ZTTLS/ZTTWS

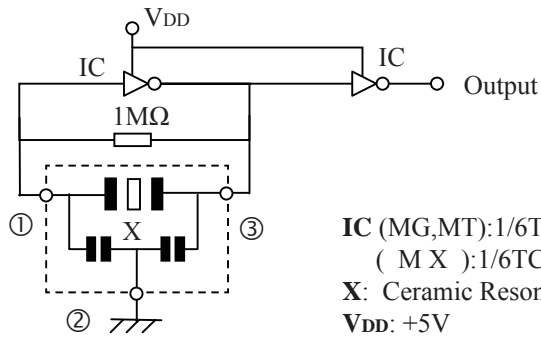


ZTTRS



Ceramic Resonators

▶ Ceramic ZTT Resonator Test Circuit for MOS IC



IC (MG,MT):1/6TC4069UBP×2
 (M X):1/6TC74HCU04×2
 X: Ceramic Resonator
 V_{DD}: +5V

▶ How to Order

ZTT16.93MX

①

P

②

① Part Number

② Packaging

Code	Packaging
T	Taping Reel
P	Bulk

