

CERAMIC RESONATOR

ZTT Series WITH BUILT-IN CAPACITOR, DIP AND CHIP TYPE



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SPECIFICATION

MODEL : ZTT6.00MT

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1. SCOPE

This specification shall cover the characteristics of the ceramic resonator ZTT6.00MT for the clock oscillation of microprocessor ect.

2. ELECTRICAL SPECIFICATION:

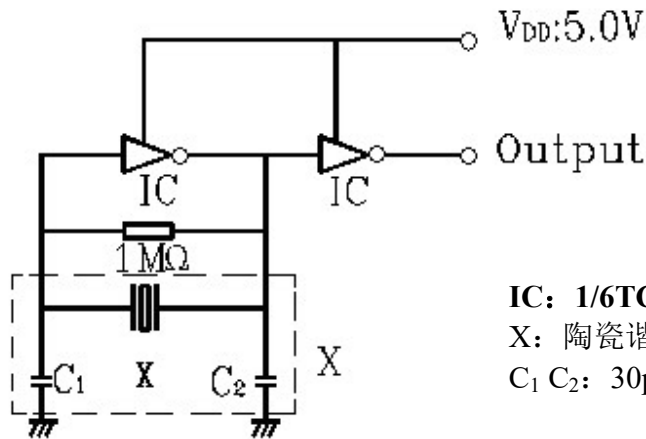
| | |
|--|--|
| Nominal Frequency | 6.000 MHz |
| Frequency Tolerance | $\pm 0.3\%$ |
| Load Capacitor | 30PF |
| Temperature Coefficient of Oscillation Frequency | $\pm 0.3\% \text{MAX}$ |
| Work Temperature | $-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$ |
| Aging for 10 years | $\pm 0.3\%$ |
| Resonator Resistance | $\leq 60 \Omega$ |
| Insulation resistance | 100M Ω /EX X min. (at 10VDC) |
| Storage Temperature | $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ |
| Withstanding voltage | 100VDC 5sec. max |

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3. TEST CIRCUIT

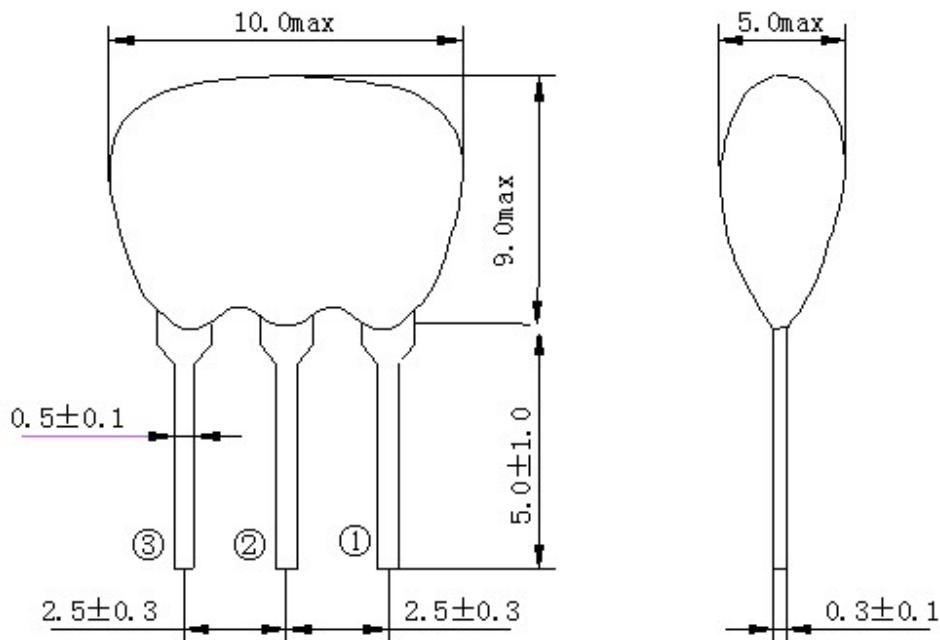


IC: 1/6TC4069UBP

X: 陶瓷谐振器

C₁ C₂: 30pF (1±20%)

4. DIMENSIONS



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5. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

| Test item | Equipment | Condition | Specification |
|----------------------------------|---------------------------------------|--|---|
| 1. TERMINAL STRENGTH TEST | tensiometer | Pull test: In loading 5 ~ quietly on the terminal, bending tests perpendicular with 10 N forces Shi 10 seconds: 2.5 millimeters of place terminal are curved 9 | FC \leq \pm 0.2% 30 Ω MAX |
| 2. SOLDERABILITY TEST | SJK-REL001、RC-328A | Solder nature tests: Terminal 1.5 MM immerse in 230 +/-5 $^{\circ}$ C tin pool inner at least: 5 +/-solders the heatproof testing second: The terminal arrives at the component root segment in 350 +/-10 $^{\circ}$ C tin pool inner immersion 1. 3 seconds of natural conditions test 5 MM time 1 hour | FC \leq \pm 0.2% 30 Ω MAX |
| 3. VIBRATION TEST | bobbing machine (HG-V4)、S&A250B | Vibration frequency pushes down 10-55 Hertz , 10 gs , extent 1.5 MM; X , Y , Z horizontal plane , every direction 1 uses 250 B do test hour, again to the sample | FC \leq \pm 0.2% 30 Ω MAX |
| 4 DROP TEST | hardwood;S&A250B | Crystal drops 3 time from 1M altitudes going ahead in the cement floor; Use 250 B do test again to the sample | FC \leq \pm 0.2% 30 Ω MAX |
| 5 TEMP & HUM CYCLING TEST | H-PTH-80CK & HM101-3ABN, S&A350B/250B | High temperature: 40 $^{\circ}$ C +/-2 $^{\circ}$ C , 100 hour; Humidity: 90 ~ 95%, natural conditions places testing 1 hour | FC \leq \pm 0.2% 30 Ω MAX |
| 6 HIGH TEMP STORAGE TEST | H-PTH-80CK CHAMBER, S&A350B/250B | Temperature: 85 $^{\circ}$ C +/-2 $^{\circ}$ C, place in the container 100 hours, 1 hour of natural conditions | FC \leq \pm 0.2% 30 Ω MAX |
| 7 LOW TEMP STORAGE TEST | H-PTH-80CK CHAMBER, S&A350B/250B | Temperature: -55 $^{\circ}$ C +/-2, places in the container 100 hours, 1 hour of natural conditions | FC \leq \pm 0.2% 30 Ω MAX |
| 8. THE TEMPERATURE POUNDS A TEST | H-PTH-80CK CHAMBER, S&A350B/250B | Temperature: -55 $^{\circ}$ C (30 minutes), test 1 hour till 85 $^{\circ}$ C (30 minutes) 5 time ofcirculation , 15 1 time of minutes , natural conditions | FC \leq \pm 0.2% 30 Ω MAX |

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