

CERAMIC RESONATOR



ZTT Series With Built-In Capacitor, Dip And Chip Type

Approved by: 黄灏东
Checked by: 杨霞
Issued by: 玉静霞

SPECIFICATION

P/N : SJK-ZTT12.00MXA6

深圳市晶科鑫实业有限公司

SHENZHEN CRYSTAL TECHNOLOGY INDUSTRIAL CO., LTD.

Add: 12F, Bldg. 3C, TianAn Cloud Park Phase 1, Bantian, Longgang, Shenzhen 518129, China

Tel: (86) 755 88352809 88352810 Fax: (86) 755 88353718 88352499

E-mail: sjk@q-crystal.com HTTP://www.q-crystal.com

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1. SCOPE

This specification shall cover the characteristics of the ceramic resonator ZTT16.000MG for the clock oscillation of microprocessor etc.

2. ELECTRICAL SPECIFICATION

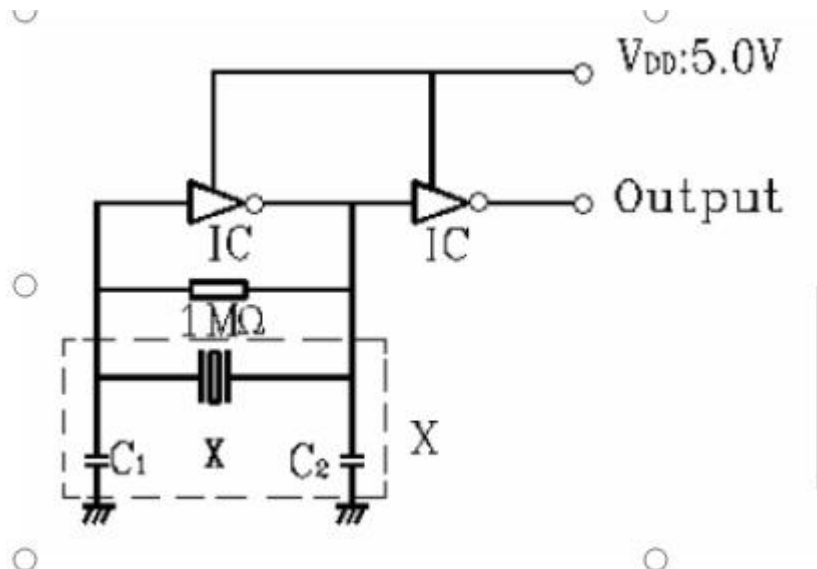
Nominal Frequency	12.000 MHz
Frequency Tolerance	$\pm 0.5\%$
Load Capacitor	15PF
Temperature Coefficient of Oscillation Frequency	$\pm 0.3\% \text{MAX}$
Work Temperature	$-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Aging for 10 years	$\pm 0.3\%$
Resonator Resistance	$\leq 30 \Omega$
Insulation resistance	500M Ω /EX X min. (at 10VDC)
Storage Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Withstanding voltage	100 (DC, 5max)

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3. TEST CIRCUIT



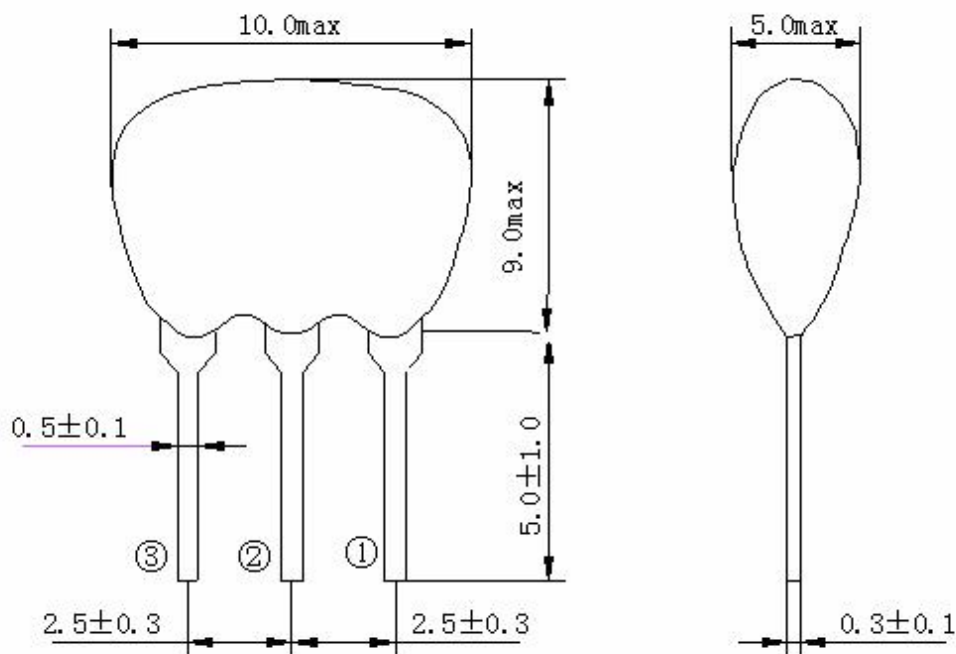
4. DIMENSIONS

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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	$FC \leq \pm 0.2\% \ 30 \ \Omega \text{ MAX}$
2. SOLDERABILITY TEST	SJK-REL001、RC-328A	Solder nature tests: Terminal 1.5 MM immerse in $230 \pm 5 \text{ } ^\circ\text{C}$ tin pool inner at least: 5 +/-solders the heatproof testing second: The terminal arrives at the component root segment in $350 \pm 10 \text{ } ^\circ\text{C}$ tin pool inner immersion 1. 3 seconds of natural conditions test 5 MM time 1 hour	$FC \leq \pm 0.2\% \ 30 \ \Omega \text{ MAX}$

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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 $^{\circ}\text{C}$ $\pm 2^{\circ}\text{C}$, 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 $^{\circ}\text{C}$ $\pm 2^{\circ}\text{C}$, 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 $^{\circ}\text{C}$ $\pm 2^{\circ}\text{C}$, 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 $^{\circ}\text{C}$ (30 minutes), test 1 hour till 85 $^{\circ}\text{C}$ (30 minutes) 5 time of circulation , 15 1 time of minutes , natural conditions	$FC \leq \pm 0.2\%$ 30 Ω MAX

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