

# CERAMIC RESONATOR



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

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## SPECIFICATION

P/N : SJK-ZTT8.00MXA6

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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                                | 8.00 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 $\Omega$ /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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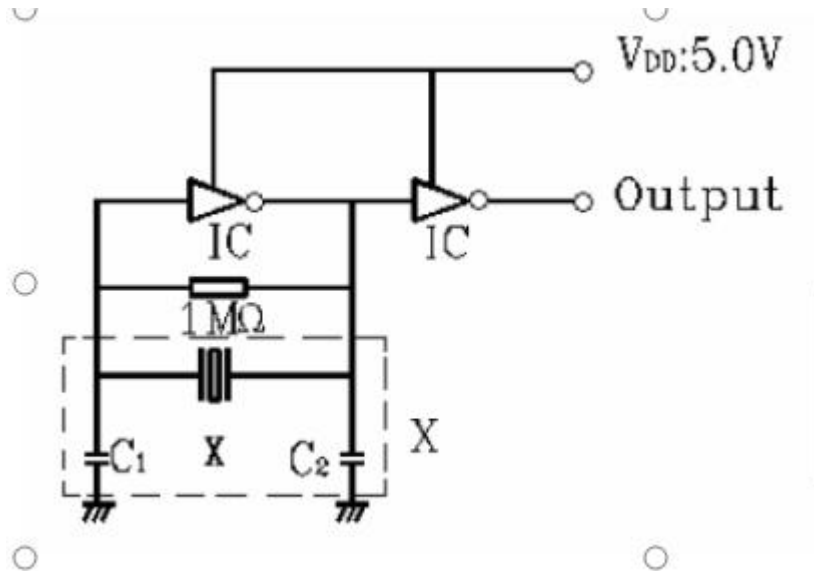
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## 3. TEST CIRCUIT



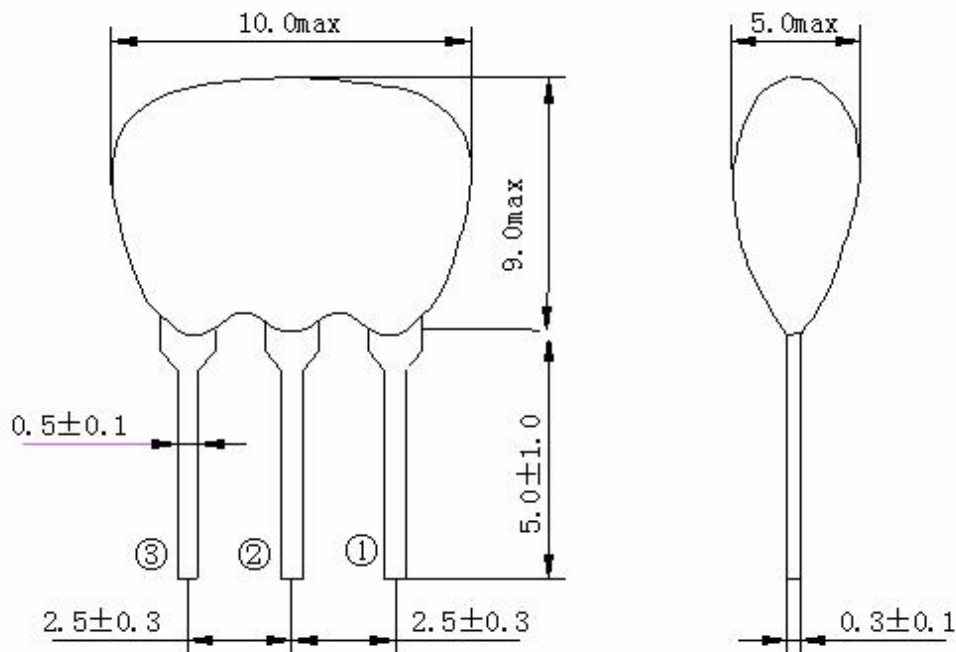
## 4. DIMENSIONS

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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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|                                  |                                       |                                                                                                                                                                  |                                     |
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| 3.VIBRATION TEST                 | bobbing machine<br>(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 $\Omega$ 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 $\Omega$ MAX |
| 5 TEMP & HUM CYCLING TEST        | H-PTH-80CK & HM101-3ABN, S&A350B/250B | High temperature: 40 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C , 100 hour; Humidity: 90 ~ 95%, natural conditions places testing 1 hour                                  | $FC \leq \pm 0.2\%$ 30 $\Omega$ MAX |
| 6 HIGH TEMP STORAGE TEST         | H-PTH-80CK CHAMBER, S&A350B/250B      | Temperature: 85 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C, place in the container 100 hours, 1 hour of natural conditions                                                | $FC \leq \pm 0.2\%$ 30 $\Omega$ MAX |
| 7 LOW TEMP STORAGE TEST          | H-PTH-80CK CHAMBER, S&A350B/250B      | Temperature: -55 $^{\circ}$ C $\pm$ 2, places in the container 100 hours, 1 hour of natural conditions                                                           | $FC \leq \pm 0.2\%$ 30 $\Omega$ 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 of circulation , 15 1 time of minutes , natural conditions      | $FC \leq \pm 0.2\%$ 30 $\Omega$ MAX |

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