

ZTA...MX Ceramic Resonator

Lead

DESCRIPTION

The ZTA MX series ceramic resonator is the miniature low profile frequency control products. It is of very competitive price than quartz crystal parts and of high stability that make of substitute the quartz crystal when need lower price.

FLECTRICAL SPECIFICATION

LLLCIRICAL	3FECII ICALION	
Frequency Range		13.01 to 50.00MHz
Frequency Tolerance (at 25°C)		±0.5% Maximum
Temperature Drift of Oscillate Frequency		±0,3% Maximum
Resonant Impedance Frequency		40Ω Maximum
Insulate Resistance		100MΩ minimum
Withstanding Voltage D.C		100V (max. 5 seconds)
Voltage	D.C. Voltage	6V Maximum
	Input Voltage	15Vpp Maximum
Built - in Capacitance		-
Operating Temperature Range		-20°C to +80°C
Storage Temperature Range		
Storage Tempe	rature Range	-55°C to +85°C

PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

Conditions Results

1. Terminal Strength

Force of 1Kg is applied to each lead in axial direction, keep for 10sec, then force of 0.5kg is applied to each lead is aerial direction. The lead shall be bend 90° degree in one direction, then in the opposite direction and return to normal

Non-evident damage

2. Resistance to soldering heat

Lead terminals are immersed up to 2.0mm of body in a solder bath (260 \pm 5°C), keep fot 5sec. ±0.5sec, then return to normal temp. for 24hrs ±2hrs

Non-evident damage and meet table-1, the mark is clear

3. Temperature cycling

Subject the resonator to -55°C for 30 minutes followed by a high temperature of +85°C for 30 minutes, 5 cycles. Return to normal temperature for 24hrs ±2hrs prior to the measurement

Non-evident damage and meet table-1, the mark is clear

4. Vibration

Vibration: frequency: 10 to 55Hz, amplitude: Non-evident damage and meet 1.5mm, keep for 6 hrs

table-1, the mark is clear

Va: 294 m/s2, pulse time: 18ms

Non-evident damage and meet table-1, the mark is clear

6. Low Air Pressure

Air pressure: 8.5kPa keep for 2hrs

Non-breakthrough or arc and meet table-1, non-evident damage the mark is clear

7. Damp /Heat (steady state)

Temperature: 40°C ±2°C, humidity: 90 to 95%. Keep for 500hrs, return to normal temperature for 24hrs ±2hrs

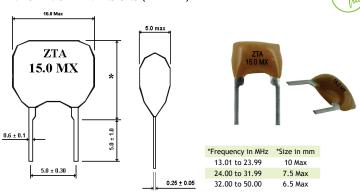
Non-evident damage and meet table-1, the mark is clear

8. Life test

Temperature: +85°C, keep for 1000hrs, return to normal temperature for 24hrs +2hrs

Meet Table-1

MECHANICAL DIMENSIONS (all in mm)

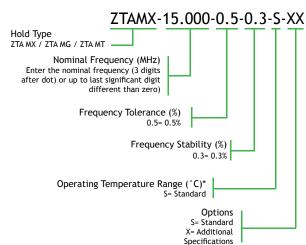


TEST CIRCUIT VDD lc lc Output R X= Ceramic Resonator VDD= +5V IC=1/6TC4069UBEx2 C2 C1 R= 1M Ohms C1, C2= 30pF

TABLE 1

No.	Test item	The value can be changed
1	Oscillate frequency max.	±0.3%
2	Resonant impedance	±5 Ω Maximum
3	Insulate resistance	100 MΩ minimum

PART NUMBERING SYSTEM (Example)



- Operating Temperature Range: -20 to 80°C (Standard)
- * Specific Operating Temperature Range under request.

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