



SPEC NO.: CR-012HDIP

# **Specification**

TO:STE

Model Name: Ceramic Resonator

**PART NO: ZTA8.00MT**CUSTOMER PART NO.:

Approval sheet:	
	Yes
Approved	No.
Customer's comments are welcomed here.	
Pls return this copy as a certificate of your approval by email.	
Approved By Date:	

#### STRONG ELECTRONICS&TECHNOLOGY LIMITED

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# History Record

Date	Part No.	SPEC No.	Description.	Remarks.
		Approved by	Check by	Design by
RoHS Compliant Lead free Lead-free soldering	ISO9001:2000 ISO14001:2004	May-15-2007	May-10-2005	Jan-16-2005
Reversions	Total Page	Yu aana dana	Liu jun	Wang hon
CR-012HDIP		- Xu gang dong	Lui pin	evung non



## **Specification For Ceramic Resonator**

#### 1. Scope:

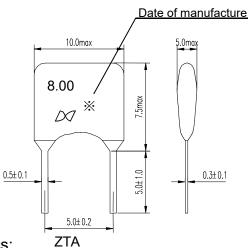
The specification is fit for ceramic resonator 8.00MHz, which is used in oscillate circuit.

#### 2. Model Name:

Model Name	Customer's part number	Customer's spec number
ZTA8.0MT		

#### 3. Outside Dimensions:

- 3-1 Outsider: The mark is clear. The appearance is smooth, non-dirty & non-damage.
- 3-2 Outsider dimension:

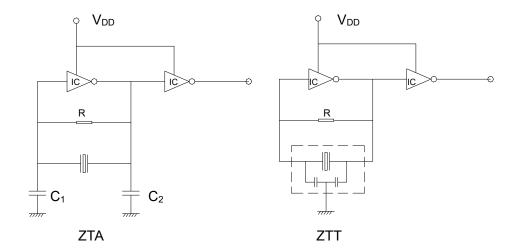


#### 4. Electrical Characteristics:

No.	Itom	Characteristics	
	ltem	ZTA8.00MT	
4-1	Oscillate Frequency (MHz)	8.00	
4.2	Frequency Tolerance max	±0.3%	
4.3	Resonant Impedance $\max(\Omega)$	25	
4.4	Built – in Capacitance (PF)		
4.5	Insulate Resistance min(M $\Omega$ )	100	
4.6	Withstanding Voltage D.C(V)	100 (max 5 sec)	
4.7	Voltage  (1) D.C Voltage max (V)  (2) Input Voltage max (V)	6 15Vp-p	
4.8	Temp characteristics of Oscillate frequency max	±0.3%(-20 ~ +80℃)	
4.9	Operating Temp Range (℃)	-20 ~ +80	
4.10	Storage Temp (°C)	-55 ~ +85	



### 5. Test Circuit:



IC: 1/6TC4069UBE×2

 $V_{DD}$ : +5V±0.1V

R:  $1M \Omega$ C<sub>1</sub>, C<sub>2</sub>: 30PF

### 6. Physical and Environmental Characteristics:

No	Item	Condition	Result
6-1	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 in aerial direction. The lead shall be bend 90 ° degree in one direction, then in the opposite direction and return to normal.	Non-evident damage.
6-2	Resistance to soldering heat	` ' and meet tah	
6-3	Thermal shock Vibration	Temp:-55~+85 $^{\circ}$ C , 5cycles, keep for 30min, return to normal temp, for 24±2hrs. Vibration:frequency:10~55Hz, amplitude:1.5mm, keep for 6hrs.	Non-evident damage and meet table-1, the mark is clear.
	Shock	Va: 294m/s², pulse time: 18ms。	
6-4	High temperature	Temp: +85℃, keep for 16hrs.	
	Damp & heat(cyclic)	Trial Db, the first circle	Non-breakthrough, or arc and meet table-1,
	Low temperature	Temp: -55℃, keep for 2hrs.	non-evident damage the mark is clear.
	Low air pressure	Air press: 8.5kPa keep for 2hrs.	



	Damp & heat (cyclic)	Trial Db, the rest cycles, return to normal temp for 24±2hrs.	
6-5	Damp & heat (steady state)	Temp: $40\pm2^{\circ}\mathrm{C}$ , humidity: $90\sim95\%$ . Keep for 500hrs, return to normal temp for 24 $\pm2$ hrs.	Non-evident damage, the mark is clear, meet table-1.
6-6	Life test	Temp:+85 $^{\circ}$ C , keep for 1000hrs, return to normal temp for 24±2hrs.	Meet table-1.

Table 1

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

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