




SPECIFICATION SHEET

SPECIFICATION SHEET NO.	R0925- CT8M000000L100	
DATE	Sep. 25, 2024	
REVISION	A4	Updated With Most Recent Data
DESCRIPTION AND MAIN PARAMETRICS	<p>Thru-Hole Ceramic Resonator, L10.0*W5.0*H8.0mm, 3 Pins Lead: 5.0mm 8.00000MHz, Built-in Capacitance, CRT Series Frequency Accuracy $\pm 0.5\%$, Operating Temp. Range $-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$ RoHS/RoHS III compliant Packed in Bulk, 500pcs/Bag</p>	
CUSTOMER		
CUSTOMER PART NO.		
CROSS REF. PART NO.		
ORIGINAL MFG/PART NO.	TGS CRT 8.0MT BLF	
PART CODE	CT8M000000L100	

VENDOR APPROVE			
Issued/Checked/Approved			
DATE: Sep. 25, 2024			

CUSTOMER APPROVE	
DATE:	

9/25/2024

MHZ THRU-HOLE CERAMIC RESONATOR CRT SERIES

MAIN FEATURE

- MHz Thru-Hole Ceramic Resonator, L10.0*W5.0*H8.0mm, 3 Pins Lead: 5.0mm
- Low cost, Built-in load capacitance type.
- Cross more competitors part
- RoHS/RoHS III compliant



APPLICATION

- Measurement Instrument
- Communication Electronics

PART CODE GUIDE

RFQ
Request For Quotation

CT	8M000000	L	100
1	2	3	4

- 1) CT: Part family Code for MHz Thru-Hole Ceramic Resonator, L10.0*W5.0*H8.0mm, 3 Pins Lead: 5.0mm
- 2) 8M000000: Frequency range code for 8.00000MHz
- 3) L: Packed in Bulk, 500pcs/Bag
- 4) 100: Specification code for original Part No. **TGS CRT 8.0MT BLF**

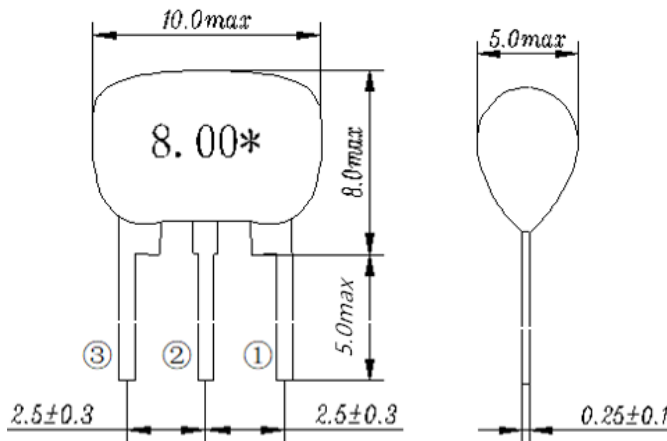
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DIMENSION (Unit: mm)

Image for reference
Maybe Color different



CRT



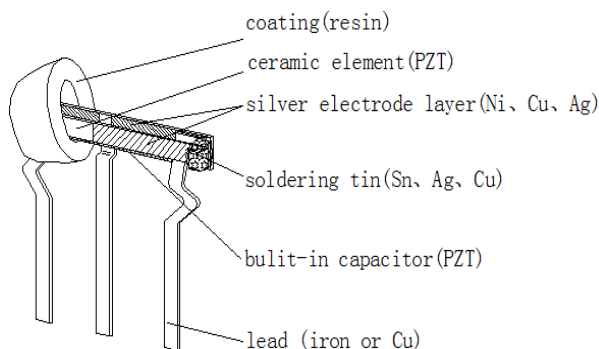
Marking

Frequency Range + QC Code/stamp

Connection

① Input ② Ground ③ Output

Structure



MHZ THRU-HOLE CERAMIC RESONATOR CRT SERIES
ELECTRICAL PARAMETERS

Parameter	Part No. Symbol	Units	Value			Condition
			Min.	Typical	Max.	
Original Manufacturer	TGS	TGS Crystals				
Holder Type	CRT	MHz Thru-Hole Ceramic Resonator L10.0*W5.0*H8.0mm, 3 Pins Lead: 5.0mm				
Frequency Range	8.0	MHz	8.0			
Withstanding Voltage	MT	V	50			@DC, 1 min
Insulation Resistance		MΩ	500			@100V, 1 min.
Operation Temperature		°C	-25		+85	
Storage Temperature		°C	-55		+85	
Rating Voltage		V	6			DC
			15			p-p
Frequency Accuracy		%	±0.5			
Resonant Impedance		Ω			25	
Temperature Coefficient of Oscillation Frequency		%			±0.3	Oscillation Frequency drift, -25°C ~ +85°C)
Oscillation Frequency Aging Rate (10 years)		%			±0.3	From initial value
IC Application		1/6TC4069UBPx2				
Design Mode						
Built-in Capacitance (C1,C2)		pF	30pF±20%			
Other	Package	B	Packed in Bulk, 500pcs/Bag			
	RoHS Status	LF	RoHS III compliant			
	Add Value		N/A			
	Internal Control Code *		N/A			

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RELIABILITY

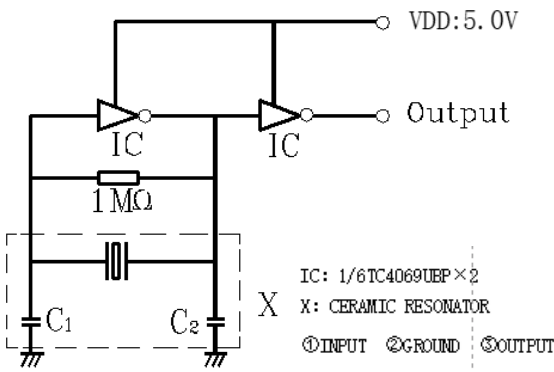
TEST ITEMS	TEST METHOD AND CONDITIONS	PERFORMANCE REQUIREMENTS
Humidity	Subject the resonator at +40°C±2°C and 90%-95% R.H. for 1000h, resonator shall be measured after being placed in natural conditions for 1h.	It shall fulfill the specifications in Table 1.
High Temperature Exposure	Subject the resonator to +85°C±5°C for 500h, resonator shall be measured after being placed in natural conditions for 1h.	It shall fulfill the specifications in Table 1.
Low Temperature Exposure	Subject the resonator to -55°C ± 5°C for 500h, resonator shall be measured after being placed in natural conditions for 1h.	It shall fulfill the specifications in Table 1.
Temperature Cycling	Submit to 5 cycles of the above sequence at condition in air. Time: 30±3 min. @ -25 +/--3°C Time: 30±3 min. @+85 +/--3°C	It shall fulfill the specifications in Table 1.
Vibration	Subject the resonator to vibration for 2h each in x y and z axis with the amplitude of 1.5mm, the frequency shall be varied uniformly between the limits of 10Hz-55Hz and then resonator shall be measured.	It shall fulfill the specifications in Table 1.
Mechanical Shock	Apply the half-sine shock pulses:981m/s2,6ms for 3 times in each direction of three mutually perpendicular planes.	It shall fulfill the specifications in Table 1.
Resistance to Soldering Heat	Lead terminals are immersed up to 2 mm from resonator's body in soldering bath of 260°C±5°C for 10s±1s and then resonator shall be measured after being placed in natural conditions for 1h.	It shall fulfill the specifications in Table 1.
Solderability	With Rosin-methanol 25% by weight, dip in 250°C±5°C solder(H63A) bath for 3s±0.5s.	More than 95% of the terminal surface of the filter shall be covered with fresh solder.
Lead restraint	Apply the force of 5N to the lead in direction of axis and with the load of 5N bend the lead through 0°→90°→90°→0°..	It shall fulfill the specifications in Table 1.

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Table 1

Item	Specification after test
Oscillation Frequency Change $\Delta F_{osc}/F_{osc}$ (%) max	± 0.3 (Refer to the initial value)
Resonant Impedance (Ω) max	25
The limits in the above table are referenced to the initial measurements.	

TEST CIRCUIT (For Reference Only)



Note:

Parts shall be tested under the condition (Temp.: 20±15°C, Humidity 65±20% R.H.) unless the standard condition (Temp.: 25±3 °C, Humidity :65±10% R.H.) is regulated to measure.

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IMPORTANT NOTES AND DISCLAIMER

Table 1

1. **ROHS COMPLIANCE:** The levels of RoHS restricted materials in this product are below the maximum concentration values (also referred to as the threshold limits) permitted for such substances, or are used in an exempted application, in accordance with EU RoHS Directive (EU) 2015/863 EC (RoHS3). RoHS Test Report for this product can be obtained at Download Center.
2. **REACH COMPLIANCE:** REACH substances of high concern (SVHCs) information is available for this product. Since the European Chemical Agency (ECHA) has published notice of their intent to frequently revise the SVHC listing for the foreseeable future, REACH Test Report for this product can be obtained at Download Center.
3. All Product parametric performance is indicated in the Electrical Characteristics for the listed herein test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.
4. NextGen Component, Inc (*NextGen*) reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
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8. *NextGen* requires that customers first obtain an RMA (Returned Merchandise Authorization) number prior to returning any products. Returns must be made within 30 days of the date of invoice, be in the original packaging, unused and like-new condition. At the time of quoting or purchasing, a product may say that it is Non-Cancelable/ Non-Returnable (NCNR). These products are not returnable and not refundable.