NextGen Components,Inc.

PART CODE: CT8M000000L100

SPECIFICATION SHEET

SPECIFICATION SHEET NO.	P0908 - CT8M000000L100
DATE	Sept. 08, 2022
REVISION	A0
DESCRIPITION	Thru-Hole Ceramic Resonator, L10.0*W5.0*H8.0mm, 3 Pins Lead: 5.0mm 8.00000MHz, Built-in Capacitance, CRT Series Frequency Accuracy ±0.5%, Operating Temp. Range -250°C ~+85°C RoHS/RoHS III compliant Packed in Bulk, 500pcs/Bag
CUSTOMER	
CUSTOMER PART NUMBER	
CROSS REF. PART NUMBER	
ORIGINAL PART NUMBER	TGS CRT 8.0MT BLF
PART CODE	CT8M000000L100

VENDOR APPROVE			
Issued/Checked/Approved	NextGen Components, Inc. Mandy Xu	NextGen Components, Inc. Ruby Zhang	NextGen Components, Inc. Jack Zhang
DATE: Sept. 08, 2022			

CUSTOMER APPROVE
DATE:

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NextGen Components,Inc.

PART CODE: **CT8M000000L100**

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
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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

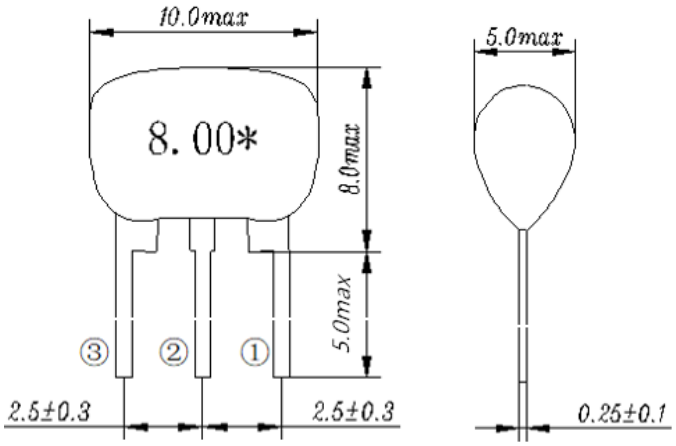
4) 100: Specification code for original Part No. **TGS CRT 8.0MT BLF**

MHZ THRU-HOLE CERAMIC RESONATOR CRT SERIES

DIMENSION (Unit: mm)

Image for reference

CRT



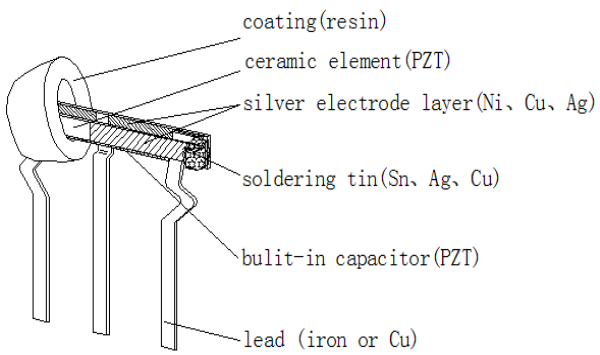
Marking

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			V	50			@DC, 1 min
Insulation Resistance			MΩ	500			@100V, 1 min.
Operation Temperance			℃	-25		+85	
Storage Temperance			℃	-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℃～+85℃)
Oscillation Frequency Aging Rate (10 years)			%			±0.3	From initial value
IC Application				1/6TC4069UBPx2			
Design Mode		MT					
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				

Note:
1) Original Part Number: TGS CRT 8.0MT BLF 2) * Internal Control Code- 2 letter or digits; Blank: N/A

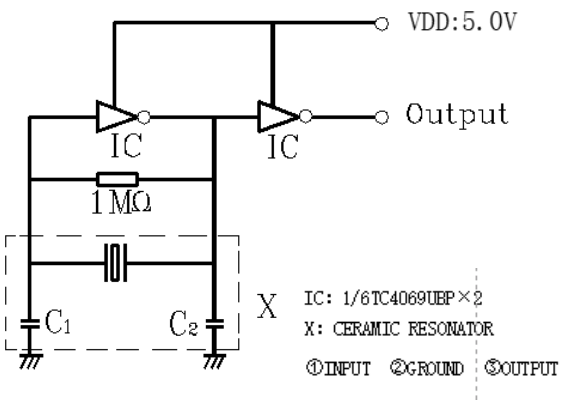
RELIABILITY

Test Items	Test Method And Conditions	Performance Requirements
Humidity	Subject the resonator at +40℃±2℃ 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℃±5℃ 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℃±5℃ 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℃ Time: 30±3 min. @+85 +/-3℃	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℃±5℃ 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℃±5℃ 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.

Table 1

Item	Specification after test
Oscillation Frequency Change △Fosc/Fosc (%) 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℃,Humidity 65±20% R.H.) unless the standard condition(Temp.: 25±3 ℃, Humidity :65±10% R.H.) is regulated to measure.

DISCLAIMER