




**SPECIFICATION SHEET**

<b>SPECIFICATION SHEET NO.</b>	N0504-FG10M70000L100
<b>DATE</b>	May 04, 2021
<b>REVISION</b>	A0
<b>DESCRIPTION</b>	<p>Thru-Hole MHz Ceramic Filter, L7.0*W4.0*H7.0mm, 3 Pins,            Lead: 5.0mm CF Series            10.700MHz Frequency Accuracy +/-30KHz, Insertion Loss: 7.0dB Max.            Operating Temp. Range -40°C ~+85°C            Packed in Bulk            RoHS/RoHS III compliant</p>
<b>CUSTOMER</b>	
<b>CUSTOMER PART NUMBER</b>	
<b>CROSS REF. PART NUMBER</b>	
<b>ORIGINAL PART NUMBER</b>	TGS CF 10.7MS3 BLF
<b>PART CODE</b>	FG10M70000L100

<b>VENDOR APPROVE</b>			
Issued/Checked/Approved			
DATE: May 04, 2021			

<b>CUSTOMER APPROVE</b>	
DATE:	

**THRU-HOLE MHZ CERAMIC FILTER CF SERIES**

**MAIN FEATURE**

- Thru-Hole MHz Ceramic Filter, L7.0\*W4.0\*H7.0mm, 3 Pins
- Low cost & short lead time.
- Cross more competitors part SFELE10M7 Series
- RoHS/RoHS III compliant



**APPLICATION**

- Measurement Instrument
- Communication Electronics

**PART CODE GUIDE**

**RFQ**  
Request For Quotation

<b>FG</b>	<b>10M70000</b>	<b>L</b>	<b>100</b>
1	2	3	4

- 1) FG: Part family Code for Thru-Hole MHz Ceramic Filter, L7.0\*W4.0\*H7.0mm, 3 Pins, CF series
- 2) 10M70000: Frequency range code for 10.70000MHz
- 3) L: Packed in Bulk
- 4) 100 Specification code for original Part No. **TGS CF 10.7MS3 BLF**

**MORE ITEMS AVAILABLE**

10.700									

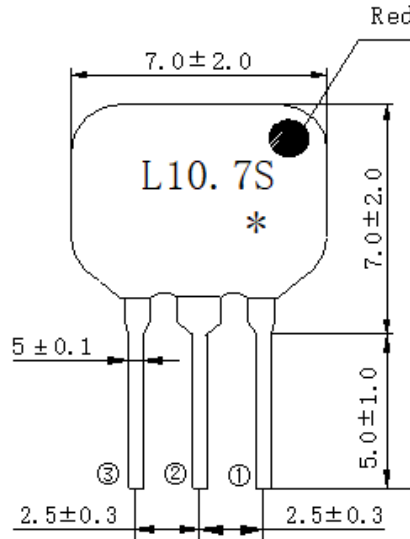
**THRU-HOLE MHZ CERAMIC FILTER CF SERIES**

**DIMENSION (Unit: mm)**

Image for reference



CRTWS

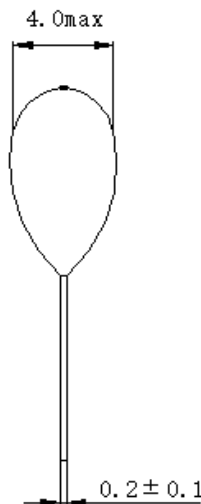


**Marking**

Line 1: Frequency Range + QC Code/stamp

**Connection**

① Input ② Ground ③ Output



**THRU-HOLE MHZ CERAMIC FILTER CF SERIES**
**ELECTRICAL PARAMETERS**

Parameter	Part No. Symbol	Units	Value			Condition
			Min.	Typical	Max.	
<b>Original Manufacturer</b>	TGS	TGS Crystals				
<b>Holder Type</b>	CF	Thru-Hole MHz Ceramic Filter, L7.0*W4.0*H7.0mm, 3 Pins, CF Series				
<b>Center Frequency (f0)</b>	10.7M	MHz	10.7000		@+/-30KHz	
<b>Bandwidth</b>	S	KHz	140	180	220	@3 dB
<b>Bandwidth</b>		KHz	-		520	@20 dB
<b>Ripple</b>		dB			1.0	within 3dB bandwidth
<b>Insertion Loss</b>		dB			7.0	@Min.loss point
<b>Temp. Coefficient of Frequency</b>		ppm/°C			±50	@-40°C ~ +85°C
<b>Spurious Response</b>		dB	40			@9.0 ~ 12.0MHz
<b>Input/Output Impedance</b>				330	Ω	
<b>Insulation Resistance</b>		MΩ	100			@DC 10V 1 minute+/-5 sec.
<b>Withstand DC Voltage</b>		V			50	@ 1 min
<b>Operating Temp. Range</b>		°C	-40		+85	
<b>Storage Temp. Range</b>	°C	-40		+85		
<b>Others</b>	<b>Package</b>	B	Packed in Bulk			
	<b>RoHS Status</b>	LF	RoHS III compliant			
	<b>Add Value</b>		N/A			
	<b>Internal Control Code *</b>		N/A			

Note:

1) Original Part Number: **TGS CF 10.7MS3 BLF**

2) \* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

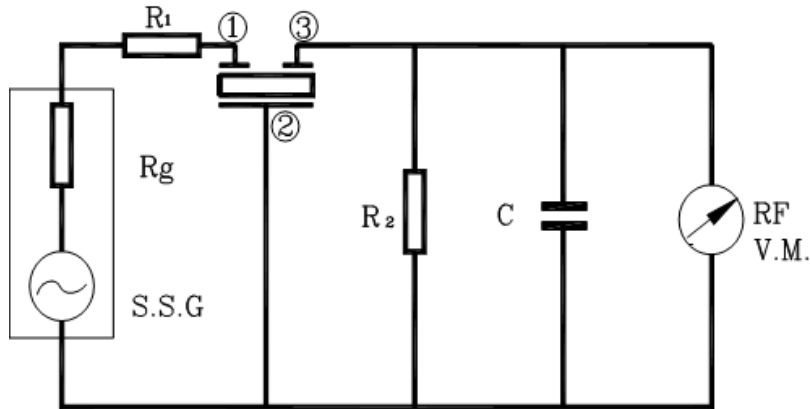
**THRU-HOLE MHZ CERAMIC FILTER CF SERIES**

**RELIABILITY**

Test Items	Test Method And Conditions	Requirement
<b>Humidity</b>	After being placed in a chamber with 90-95% R.H. at 40±2°C for 100 hours and then being placed in room temperature for 1 hour, filter shall be measured.	It shall meet Specification
<b>High Temperature</b>	After being placed in a chamber with 80±2 °C, for 100 hours and then being placed in room temperature for 1 hour, filter shall be measured.	It shall meet Specification
<b>Low Temperature</b>	After being placed in a chamber with -20±2 °C, for 100 hours and then being placed in room temperature for 1 hour, filter shall be measured.	It shall meet Specification
<b>Heat Shock</b>	After being kept at room temperature, filter shall be placed at temperature of -55 °C , for 30 minutes, then be placed at temperature. 85 °C, for 30 minutes. After that returned to -55 °C again. Repeated above cycle for 5 times. After being kept in room temp. for 1 hour, filter shall be measured	It shall meet Specification
<b>Resistance to Solder Heat</b>	Lead terminals are immersed up to 1.5mm from filter’s body in soldering bath of 350± 10°C, for 3±0.5 sec. And then filter shall be measured after being placed in room temperature for 1 hour.	It shall meet Specification
<b>Solderability</b>	Lead terminals are immersed in aide solder for 5 sec and then immersed in soldering bath of 230±5°C, for 3±0.5 sec.	It shall meet Specification
<b>Drop Test</b>	Filter shall be measured after 3 times random drops from the height of 30 cm on concrete floor	No visible damage and It shall meet Specification
<b>Adhesion</b>	A static load of 20N to the direction of the arrow (see Fig. 4) shall be applied on the core of the Component and hold for 10 seconds. Filter shall be soldered correctly and tightly to PCB.	It shall meet Specification
<b>Vibration</b>	Filter shall be measured after being applied vibration of amplitude of 1.5mm with 10-55Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours	No visible damage it shall meet Specification
<b>Substrate Bending Test</b>	Apply pressure in the direction of arrow (see Fig. 3) at a rate of about 0.5mm per second until it reaches a bend of 3mm and hold for 30 seconds.	It shall meet Specification

**THRU-HOLE MHZ CERAMIC FILTER CF SERIES**

**TEST CIRCUIT (For Reference Only)**



C=10pF(Including stray capacitance and input capacitance of RF voltmeter)

**Note:**

Parts shall be tested under the condition ( Temp.:  $20\pm 15^{\circ}\text{C}$ , Humidity  $65\pm 20\%$  R.H.) unless the standard condition(Temp.:  $25\pm 3^{\circ}\text{C}$ , Humidity :  $65\pm 10\%$  R.H.)is regulated to measure.

**DISCLAIMER**

NextGen Components, Inc. reserves the right to make changes to the product(s) and or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information