




SPECIFICATION SHEET

SPECIFICATION SHEET NO.	N0504-FG10M70000L100
DATE	May 04, 2021
REVISION	A0
DESCRIPTION	<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>
CUSTOMER	
CUSTOMER PART NUMBER	
CROSS REF. PART NUMBER	
ORIGINAL PART NUMBER	TGS CF 10.7MS3 BLF
PART CODE	FG10M70000L100

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

CUSTOMER APPROVE	
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](#)

FG	10M70000	L	100
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									

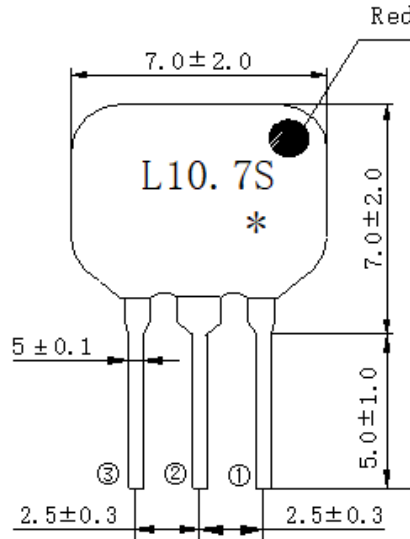
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DIMENSION (Unit: mm)

Image for reference



CRTWS

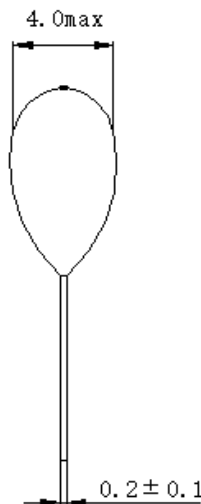


Marking

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.	
Original Manufacturer	TGS	TGS Crystals				
Holder Type	CF	Thru-Hole MHz Ceramic Filter, L7.0*W4.0*H7.0mm, 3 Pins, CF Series				
Center Frequency (f0)	10.7M	MHz	10.7000		@+/-30KHz	
Bandwidth	S	KHz	140	180	220	@3 dB
Bandwidth		KHz	-		520	@20 dB
Ripple		dB			1.0	within 3dB bandwidth
Insertion Loss		dB			7.0	@Min.loss point
Temp. Coefficient of Frequency		ppm/°C			±50	@-40°C ~ +85°C
Spurious Response		dB	40			@9.0 ~ 12.0MHz
Input/Output Impedance				330	Ω	
Insulation Resistance		MΩ	100			@DC 10V 1 minute+/-5 sec.
Withstand DC Voltage		V			50	@ 1 min
Operating Temp. Range		°C	-40		+85	
Storage Temp. Range	°C	-40		+85		
Others	Package	B	Packed in Bulk			
	RoHS Status	LF	RoHS III compliant			
	Add Value		N/A			
	Internal Control Code *		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.

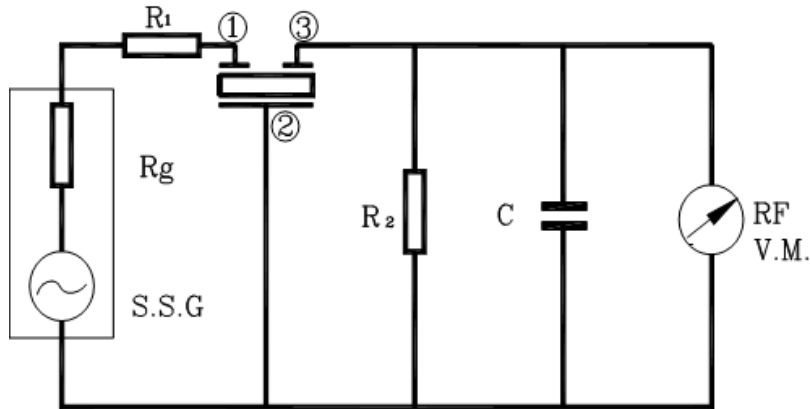
THRU-HOLE MHZ CERAMIC FILTER CF SERIES

RELIABILITY

Test Items	Test Method And Conditions	Requirement
Humidity	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
High Temperature	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
Low Temperature	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
Heat Shock	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
Resistance to Solder Heat	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
Solderability	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
Drop Test	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
Adhesion	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
Vibration	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
Substrate Bending Test	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

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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.

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