SPEC NO.: -181119

Specification

TO:STE1289
Model Name: Ceramic Filter
PART NO: LTCV10.7MA5-A
CUSTOMER PART NO.:

Approval sheet:

Approved	Yes No.

Customer's comments are welcomed here.

Pls return this copy as a certificate of your approval by Email.

Approved By Date: _____

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History Record

Date	Part No.	SPEC No.	Description.	Remarks.
RoHS Compliant Lead free Lead-free soldering	ISO9001:2000 ISO14001:2004	**Approved by**	**Check by**	**Design by**
		Nov-17-2017	**NOV-17-2017**	**NOV-17-2017**
Reversions	**Total Page**	*Xu gang dong*	*Liu jun*	*Wang hon*

RoHS Compliant
Lead free
Lead-free soldering

SMD CERAMIC FILTER SPECIFICATION

1. Scope

This specification shall cover the characteristics of the chip type ceramic filter with 10.7MHz.

2. Part Number: LTCV10.7MA5-A

3. Electrical Characteristics

No	Items	Requirements
3.1	Center Frequency (Fo)	A:10.70MHz±30KHz (red) B:10.67MHz±30KHz (blue) C:10.73MHz±30KHz (orange) D:10.64MHz±30KHz (black) E:10.76MHz±30KHz (white)
3.2	Band Width (3 dB)	280±50KHz
3.3	Band Width (20dB)	590KHz max.
3.4	Insertion Loss	5.0dB max.
3.5	Ripple	1.0dB max.
3.6	Spurious Response (9-12MHz)	35 dB min.
3.8	Input/Output Impedance	330 ohm

4. Rating

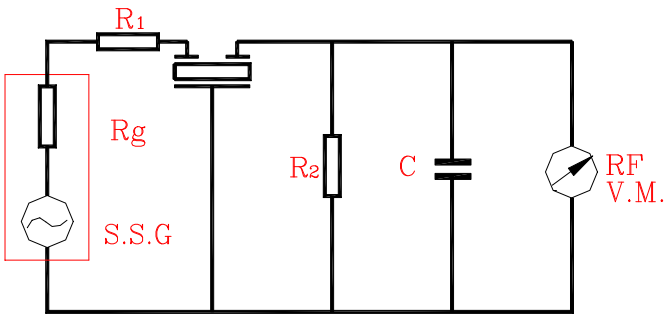
	Items	Spec.
4.1	Withstanding Voltage	DC 50V / min. Max.
4.2	Insulation Resistance	100 M ohm min.
4.3	Operating temperature range	-40~+85C
4.4	Storage temperature range	-55~+105C

5. Measuring method

5.1 Measurement Condition

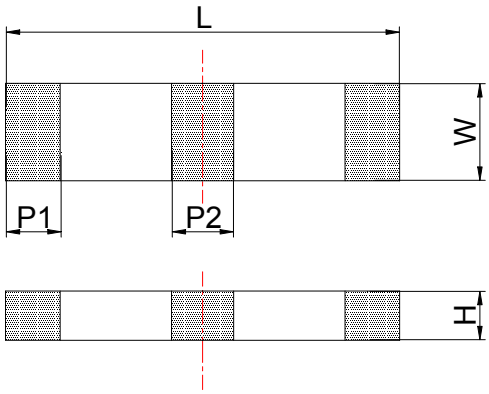
Parts shall be measured under a condition (Temp: 25±3C. Humidity: 65±5% R.H.) unless the standard condition(Temp: 20±15C. Humidity: 65±20% R.H.) is regulated to measure.

5.2 TEST CIRCUIT



R2=R1+Rg=330ohm C=10PF

6. Dimensions



P/N	Dimensions (mm)				
	L	W	H	P1	P2
LTCV10.7MA5	6.9±0.3	2.9±0.2	1.5±0.2	1.0±0.3	1.2±0.3

6.PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

No	Item	Condition of Test	Performance Requirements
6.1	Humidity	Keep the filter at 40±2C and 90-95% RH for 96 hours. Then release the filter into the room condition for 1 hour before measurement.	It shall fulfill the specifications in Table 1.
6.2	High Temperature Exposure	Subject the filter to 80±5C for 96±4 hours. Then release the filter into the room conditions for 1 hour prior to the measurement.	It shall fulfill the specifications in Table 1.
6.3	Low Temperature	Subject the filter to –40±5C for 96±4 hours. Then release the filter into the room conditions for 1 hour prior to the measurement.	It shall fulfill the specifications in Table 1.
6.4	Temperature Cycling	Subject the filter to -40C for 30 min.followed by a high temperature of 80C for 30 min. Cycling shall be repeated 5 times with a transfer time of 15 sec.at the room condition. Then release the filter into the room temperature for 1 hour prior to the measurement.	It shall fulfill the specifications in Table 1.
6.5	Vibration	Subject the filter to vibration for 2 hours each in x.y and z axis with the amplitude of 1.5mm, the frequency shall be varied uniformly between the limits of 10—55Hz	It shall fulfill the specifications in Table 1.
6.6	Mechanical Shock	Drop the filter randomly onto a concrete floor from the height of 1 meter 3 times.	It shall fulfill the specifications in Table 1.
6.7	Resistance to Solder Heat	Dip the filter terminals no closer than 2 mm into the solder bath at 260±10C for 3±0.5 sec.	It shall fulfill the specifications in Table 1.
6.8	Solder ability	Dip the filter terminals no closer than 2 mm into the solder bath at 235±5C for 3±0.5 sec.	More than 95% of the terminal surface of the filter shall be covered with fresh solder.

6. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

(Continued from the preceding page)

No	Item	Condition of Test	Performance Requirements
6.9	Lead Fatigue (1) Pulling Test	Weight along with the direction of terminals without any shock 5 Newton for 10 sec.	The filter shall show no evidence of damage and shall fulfill all the initial electric characteristics.
	(2) Bending Test	Lead shall be subject to withstand against 90 degree bending at its stem. This operation shall be done towards both direction.	

TABLE 1

Item	Specification
Insertion Loss	±2 dB max.
3 dB Band Width	±25KHz max.
20 dB Band Width	±60KHz max.