



SPEC NO.: UM-5-10M15A

# **SPECIFICATION**

Samples Approval sheet.

TO: STE508 Model Name:

**PART NO: UM-5-10M15A** CUSTOMER PART NO.:

Application:

Bumpies ripprovar sneet.	
	Yes
Approved	No.
Customer's comments are welcomed here.	
Pls return this copy as a certificate of your approval by Fax.	
Approved By Date:	

# STRONG ELECTRONICS&TECHNOLOGY LIMITED

Tel:86-755-84528985 Fax: 86-755-84528986 Email:info@strongelectronics.net www.sawfilter.cn



# History Record

Date	Part No.	SPEC No.	Discription.	Remarks.
		Approved by	Check by	Design by
RoHS Compliant Lead free Lead-free soldering	ISO9001:2000 ISO14001:2004	June-2-2012	June-2-2012	May-31-2011
Reversions	Total Page	Xu gang dong	Liu jun	Wang hon



# **SPECIFICATION OF CRYSTAL FILTER**

# 1. SCOPE

This specification shall cover the characteristics of crystal filter with

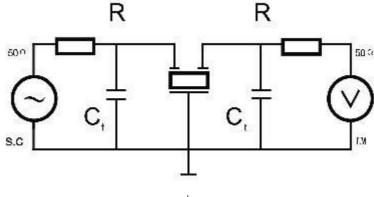
P/N: UM-5-10M15A

# 2. ELECTRICAL SPECIFICATION

ITEM	SPECIFICATION
Holder type	UM-5-10M15A
Central Frequency	10.700MHz
Number of pole	2 poles
Pass Bandwidth	$3 dB/ \pm 7.5 KHz min.$
Stop Bandwidth	$18$ dB/ $\pm 25.0$ KHz max.
Guaranteed attenuation(1)	40dB min./Fo+300 to +1000KHz
Guaranteed attenuation(2)	45dB min./Fo-1000 to -300KHz
Ripple	0.5dB max.
Insertion Loss	1.5dB max.
Terminating Impedance	3000 Ω //2.0pF
INSULATION RESISTANCE	500M ohm DC 100
Operating temperature	-20~+70 °C
Storage Temperature range	-40~+85 °C
Aging in one year	3ppm/year
Test Equipment:	HP E5100A NETWORK ANALYZER

# 3.Test Circuit

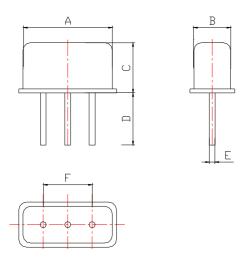




R=2950Ω ( $\pm$ 5%) Ct=2.0PF

Measurement shall be carried out at the reference temperature of  $25\pm2^{\circ}$ C and  $90\pm10\%$  RH. It shall be possibly done at  $5\sim30^{\circ}$ C and  $45\sim85\%$  RH unless the result is doubtful.

# 4. DIMENSION



	Α	В	С	D	E	F
UM-5	$7.8 \pm 0.2$	$3.0 \pm 0.2$	$6.0 \pm 0.2$	12.5±1.0	Φ0.32±0.05	3.75±0.2

# 5. MECHANICAL CHARACTERISTICS

### 1). Mechanical Shock

Drop the resonator randomly onto a concrete floor from the height of 30cm for 3 times. It shall fulfill the specification requirements.

### 2). Vibration

Subject the resonator to the vibration for 1 hour each in the X.Y. and Z-axes with the amplitude of 1.5 mm, 10 to 55 Hz. It shall fulfill the specification requirements.



#### 3). Resistance To Solder Heat

Dip the resonator terminals no closer than 1.5mm into solder bath at 350  $\pm 10^{\circ}$ C for  $3\pm 0.5$ s Or dip the resonator terminals no closer than 1.5mm into solder bath at 200 +5°C for 10+1s,then leave the resonator into room condition for 1 hour. It shall meet the specification requirements.

## 4). Solderability

Dip the resonator terminals into the solder bath at  $230 + 5^{\circ}$ C for 3+0.5s. More than 95% of the terminal surface of the resonator shall be covered with fresh solder.

#### 5).Pulling Test

Weight along with the direction of lead without any shock 1kg for 10sec. The resonator shall show no evidence of damage and shall satisfy all the initial electric characteristics.

#### 6). Bending Test

Lead shall be subject to withstand against 90° bending at its stem. This operation shall be done toward both directions, and each operation shall take 3sec. The resonator shall show no evidence of damage and shall satisfy all the initial electric characteristics.