

CUSTOMER 客户:

规格书编号

**SPEC NO:** 

# 产品规格书 SPECIFICATION

•							
PRODUCT 产品:	CERAMIC FILTER						
MODEL NO 型 号:	LTUC450H						
PREPARED 编 制:	LEO	CHECKED 审 相	亥:YORK				
APPROVED 批 准:	LIUMING	D A T E 日 期	<b>月:</b> 2013-6-19				
客户确认 CUSTOMER RECEIVED:							
审核 CHECKE	D 批准 APPROVED		日期 DATE				

## 无锡市好达电子有限公司 Shoulder Electronics Limited



## 更改历史记录 History Record

更改日期 Date	规格书编号 Spec No	产品型号 Part No	客户产品型号 Customer No	更改内容描述 Modify Content	备注 Remark



### **CERAMIC FILTER**

1. THIS SPECIFICATION SHALL COVER THE CHARACTERISTICS OF CERAMIC FILTER WITH 450KHz.

#### 2. PART NUMBER LTUC450H

SPECIFICATION No.: QJ/A25•10•0512

3. ELECTRONICAL SPECIFICATIONS

A. CENTRE FREQUENCY (f $_{\circ}$ ) : 450.0 KHz $\pm$ 1.0KHz. B. BAND WIDTH AT 6 dB :  $\pm$ 3.0 MIN.(TO 450KHz) C. BAND WIDTH AT 40 dB :  $\pm$ 9.0 KHz MAX.(TO 450KHz) D. STOP BAND ATTENUATION : 30.0 dB MIN.(AT f $_{\circ}$   $\pm$ 100KHz)

E. RIPPLE : 2.0 dB MAX.

F. INSERTION LOSS : 5.0 dB MAX (AT MINIMUM LOSS POINT)

G. TEMPRATURE COEFFICIENT

OF CENTER FRENQUENCY :  $\pm 50$ PPM/°C Max.(-20 TO +80°C)

H. INPUT/OUTPUT IMPEDANCE : 1.5K $\Omega$ 

NOTE: A) CENTER FREQUENCY SHALL BE DEFIED AS THE CENTRAL VALUE OF THE BAND WITH AT 6 dB

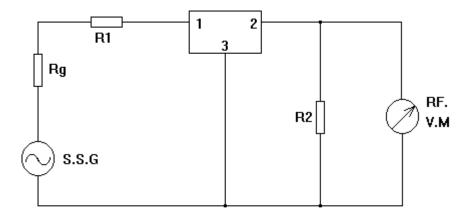
B) TEMPRATURE COEFFICIENT OF CENTER FREQUENCY SHALL BE DEFINED AS THE AVERAGE OF THE CENTRAL FREQUECY.

#### 4. MEASUREMENT

A. ENVIRONMENTAL CONDITION

MEASUREMENT SHALL BE CARRIED OUT AT THE REFERENCE TEMPERATURE OF  $25\,^\circ\text{C}$   $\pm\,2\,^\circ\text{C}$ . IT SHALL BE POSSIBLY DONE AT  $5\,^\circ\text{C}$  TO  $35\,^\circ\text{C}$  UNLESS IT IS QUESTIONABLE.

B. MEASURING CIRCUIT



Rg+R1=R2=Input/Output Impedance

#S.S.G. (STANDARD SIGNAL GENERATION)

R.F.V.M. (RADIO FREQUENCY VOLTAGE METER)

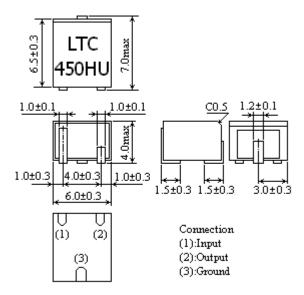
 $Rg+R1=R2=1.5 K\Omega$ 



### **CERAMIC FILTER**

C<=50 PF

#### 5. DIMENSIONS(mm)



#### 6. ENVIRONMENTAL CHARACTERISTICS

6-1 HIGH TEMPERATURE EXPOSURE

SUBJECT THE FILTER TO +80°C FOR 96 HOURS. THEN RELEASE

THE FILTER INTO THE ROOM CONDITIONS FOR 2 HOURS PRIOR

TO THE MEASUREMENT. IT SHALL FULFILL THE SPECIFICATIONS IN TABLE 1.

6-2 MOISTURE

KEEP THE FILTER AT  $40\,^{\circ}\mathrm{C}$  AND 95% RH FOR 96 HOURS.THEN RELEASE THE FILTER INTO THE ROOM CONDITIONS FOR 2 HOURS PRIOR TO THE MEASUREMENT. IT SHALL FULFILL THE SPECIFICATIONS IN TABLE 1.

6-3 LOW TEMPERATURE EXPOSURE

SUBJECT THE FILTER TO -20°C FOR 96 HOURS. THEN RELEASE

THE FILTER INTO THE ROOM CONDITIONS FOR 2 HOURS PRIOR

TO THE MEASUREMENT. IT SHALL FULFILL THE SPECIFICATIONS
IN TABLE 1.

#### 6-4 TEMPERATURE CYCLING

SUBJECT THE FILTER TO A LOW TEMPERATURE OF -20°C FOR 30 MINUTES. FOLLOWSING BY A HIGH TEMPERATURE OF +85°C FOR 30 MINUTES. THEN RELEASE THE FILTER INTO THE ROOM CONDITIONS FOR 2 HOURS PRIOR TO THE MESUREMENT. IT SHALL MEET THE SPECIFICATIONS IN TABLE 1.



**CERAMIC FILTER** 

DIP THE FILTER TERMINALS NO CLOSER THAN 1.5mm INTO THE SOLDER BATH AT  $260^{\circ}$ C  $\pm 10^{\circ}$ C FOR  $10\pm 1$  SEC. THEN RELEASE THE FILTER INTO THE ROOM CONDITIONS FOR 2 HOURS. THE FILTER SHALL MEET THE SPECIFICATIONS IN TABLE 1.

#### 6-6 MECHANICAL SHOCK

DROP THE FILTER RANDOMLY ONTO THE CONCRETE FLOOR FROM THE HEIGHT OF 30cm 3 TIMES.THE FILTER SHALL FULFILL THE SPECIFICATIONS IN TABLE 1.

#### 6-7 VIBRATION

SUBJECT THE FILTER TO THE VIBRATION FOR 1 HOUR EACH IN X,Y AND Z AXLES WITH THE AMPLITUDE OF 1.5 mm AT 10 TO 55 Hz. THE FILTER SHALL FULFILL THE SPECIFICATIONS IN TABLE 1.

#### 6-8 LEAD FATIGUE

#### 6-8-1 PULLING TEST

WEIGHT ALONG WITH THE DIRECTION OF LEAD WITHOUT AN SHOCK 1.5KG. THE FILTER SHALL SATISFY ALL THE INITIAL CHARACTERISTICS.

#### 6-8-2 BENDING TEST

LEAD SHALL BE SUBJECT TO WITHSTAND AGAINST 90° BENDING IN THE DERECTION OF THICKNESS. THIS OPERATION SHALL BE DONE TOWARD BOTH DIRECTION. THE FILTER SHALL SHOW NO EVIDENCE OF DAMAGE AND SHALL SATISFY ALL THE INITIAL ELECTRICAL CHARACTERISTICS.

#### TABLE 1

ITEM	SPECIFICATION		
CENTRE FREQUENCY(f。)	450.0±1.0 KHz		
BAND WIDTH(6 dB)	±3KHz Min		
SELECTIVITY(40dB)	±9 KHz Max		
STOP BAND ATTENUATION	30.0 dB Min		
RIPPLE	2.0 dB Max		
INSERTION LOSS	5.0dB Max		