RoHS Free

1. THIS SPECIFICATION SHALL COVER THE CHARACTERISTICS OF CERAMIC FILTER WITH 480KHz.

2. PART NUMBER : **LT480EU**
SPECIFICATION No.: QJ/A21•13•0403

3. ELECTRONICAL SPECIFICATIONS

A. CENTRE FREQUENCY ($f_o$) : 480.0 KHz±1.0KHz.

B. BAND WIDTH AT 6 dB : ±7.5 MIN.(TO 455KHz)

C. BAND WIDTH AT 40 dB : ±15.0 KHz MAX.(TO 455KHz)

D. STOP BAND ATTENUATION : 30.0 dB MIN.(AT $f_o$ ±100KHz)

E. RIPPLE : 2.0 dB MAX.

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

G. TEMPRATURE COEFFICIENT OF CENTER FRENQUENCY : ±50PPM/℃ Max.(-20 TO +80℃)

H. INPUT/OUTPUT IMPEDANCE : 1.5KΩ

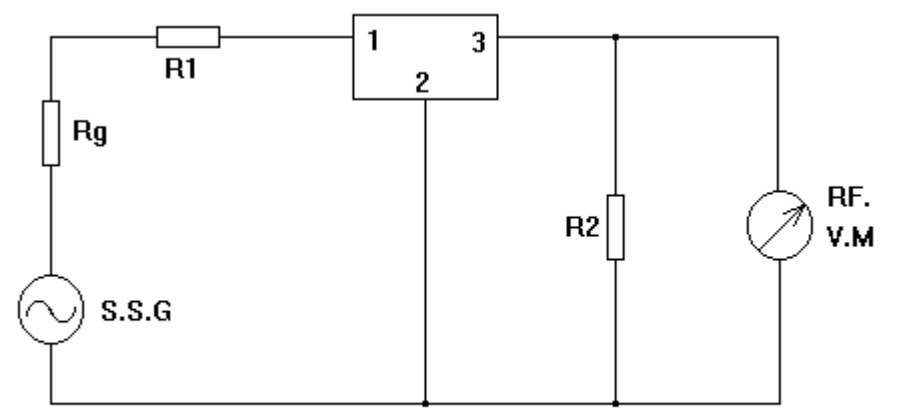
NOTE : A) CENTER FREQUENCY SHALL BE DEFIED AS THE CENTRAL VALUE OF THE BAND WITH AT 6 dB

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℃ ±2℃. IT SHALL BE POSSIBLY DONE AT 5℃TO 35℃UNLESS IT IS QUESTIONABLE.

B. MEASURING CIRCUIT

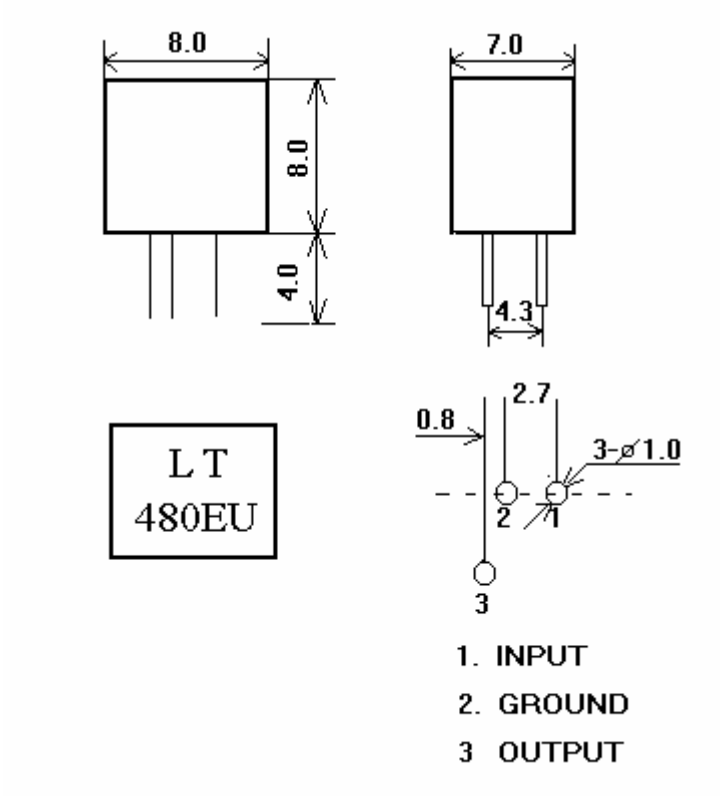



Rg+R1=R2=Input/Output Impedance

#S.S.G. (STANDARD SIGNAL GENERATION)
R.F.V.M. (RADIO FREQUENCY VOLTAGE METER)
Rg+R1=R2=1.5 KΩ
C<=50 PF

RoHS Free

5. DIMENSIONS(mm)




6. ENVIRONMENTAL CHARACTERISTICS

6-1 HIGH TEMPERATURE STORAGE

SUBJECT THE FILTER TO +80℃ 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℃ 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 STORAGE

SUBJECT THE FILTER TO -20℃ 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℃ FOR 30 MINUTES. FOLLOWSING BY A HIGH TEMPERATURE OF +85℃ 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.

RoHS Free

6-5 RESISTANCE TO SOLDER HEAT

DIP THE FILTER TERMINALS NO CLOSER THAN 1.5mm INTO THE SOLDER BATH AT 260℃ ±10℃ FOR 10±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 3 KG. 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。) | 480.0±1.0 KHz |
| BAND WIDTH(6 dB) | ±7.5 KHz Min |
| SELECTIVITY(40dB) | ±15.0 KHz Max |
| STOP BAND ATTENUATION | 30.0 dB Min |
| RIPPLE | 2.0 dB Max |
| INSERTION LOSS | 5.0dB Max |