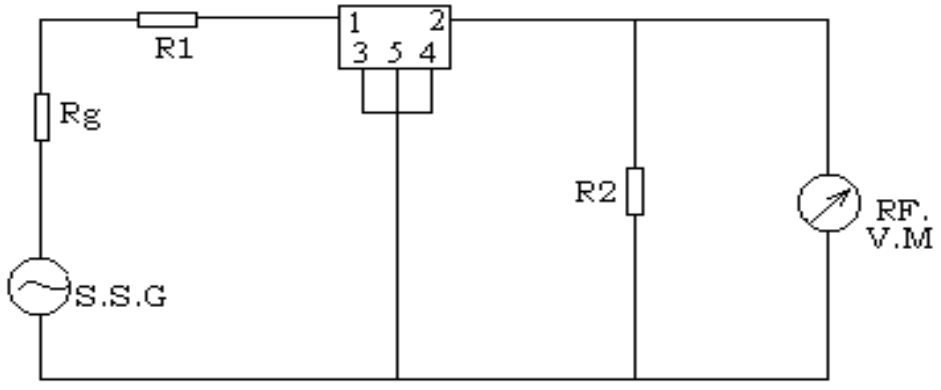
1. THIS SPECIFICATION SHALL COVER THE CHARACTERISTICS OF CERAMIC FIL TER WITH 450KHz,INTENED FOR USE IN TRANSCEIVERS,ETC.

2. PART NUMBER: LTM450IW

3. ELECTRONICAL SPECIFICATIONS
   - A. CENTRE FREQUENCY(f。) : 450 KHz±1.0KHz
   - B. BAND WIDTH AT 6 dB : ±2.0 KHz MIN.(TO 450KHz)
   - C. BAND WIDTH AT 50 dB : ±7.5 KHz MAX.(TO 450KHz)
   - D. STOP BAND ATTENUATION : 40 dB MIN.(AT f。±100KHz)
   - E. RIPPLE : 2.0 dB MAX.(AT f。±5.0KHz)
   - F. INSERTION LOSS : 6.0 dB MAX.(AT THE SMALLEST LOSS)
   - G. TEMPRATURE COEFFICIENT OF CENTER FRENQUENCY : ±50PPM/℃ Max.(-20 TO +80℃)
   - H. INPUT/OUTPUT IMPEDANCE : 2.0 KΩ

   NOTE : A) CENTER FREQUENCY SHALL BE DEFIED AS THE CENTRAL VALUE OF THE BAND WTTH AL 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℃ CUNLESS IT IS QUESTIONABLE.
   - B. MEASURING CIRCUIT

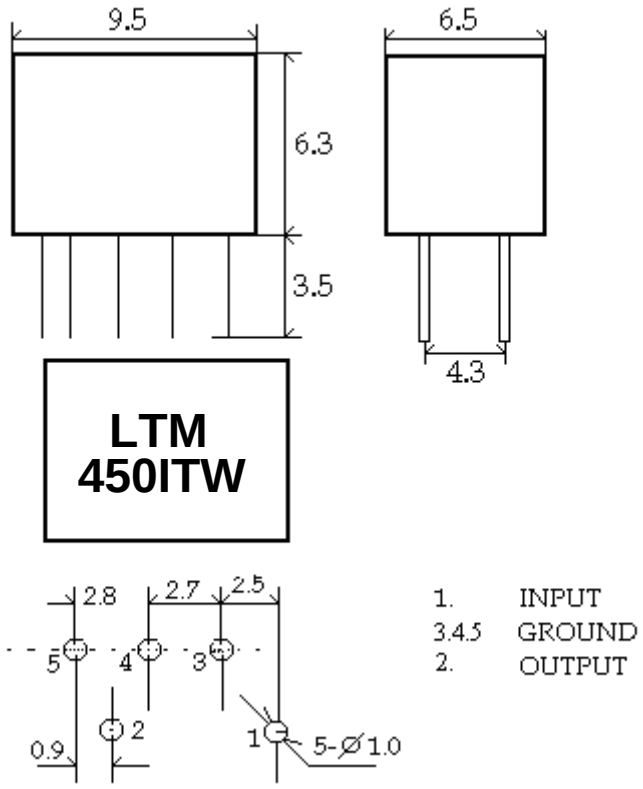


Rg+R1=R2=Input/ output Impedance

S.S.G. (STANDARD SIGNAL GENERATION)

R.F.V.M. (RADIO FREQUENCY VOLTAGE METER)
Rg+R1=R2=2.0KΩ
C < =50PF

5. DIMENSIONS(mm)



6. ENVIRONMENTAL CHARACTERISTICS

6-1 HIGH TEMPERATURE EXPOSURE

SUBJECT THE FITTER TO +80℃ FOR 96 HOURS. THEN RELEASE THE FILTER INTO THE SPECIFICATIONS IN TABLE 1.

6-2 MOISURE

KEEP THE FILTER AT 40℃ AND 95%RHFOR 96 HOURS.THEN RELEASE THE FILTER INTO THE ROOM CONDITIONS FOR 1 TO 2 HOURS PRIOR TO THE MEASUREMENT. IT SHALL FULFILL THE SPECIFICATIONS IN TABLE 1.

6-3 LOW TEMPERATURE EXPOSURE

SUBJECT THE FILTER TO -20℃ FOR 96 HOURS. THEN RELEASE THE FILTER INTO THE ROOM CONDITIONS FOR 1 TO 2 HOURS PRIOR TO THE MEASUREMENT. IT SHALL FULFILL THE SPECIFIC ATIONS IN TABLE 1.

6-4 TEMPERATURE CYCLING

SUBJECT THE FILTER TO ALOW TEMPERATURE OF -55℃ FOR 30 MINUTES. FOLLOWSING BY A HIGH TEMPERATURE OF +85℃ FOR 30 MINUTES. THEN RELEASE THE FILTER INTO THE ROOM CONDITIONS FOR 1 TO 2 HOURS PRIOR TO THE MESUREMENT. IT SHALL MEET THE SPECIFICATIONS IN TABLE 1.

6-5 RESISTANCE TO SOLDER HEAT

DIP THE FILTER TERMINALS NO CLOSER THAN 1.5mm INTO THE SOLDER BATH AT 270℃ ±10℃ FOR 10±1 SEC. THEN RELEASE THE FILTER IN TO THE ROOM CONDITIONS FOR 1 TO 2 HOURS. THE FILTER SHALL MEET THE SPECIFICATIONS IN TABLE 1.

6-6 MECHANICAL SHOCK

DROP THE FIL TER 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 AXES WITH THE AMPLITUDE OF 1.5mm AT 10 TO 55Hz. THE FILTER SHALL FULFILLTHE 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 INITIALL 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 FIL TER SHALL SHOW NOEVIDENCE OF DAMAGE AND SHALL SATISFY ALL THE INITIAL ELECTRIC AL CHARACTERISTICS.

TABLE 1

ITEM	SPECIFICATION
CENTRE FREQUENCY(f。)	450±1.0 KHz Max
BAND WIDTH(6 dB)	±2.0 KHz Min
SELECTIVITY(50 dB)	±7.5 KHz Max
STOP BAND ATTENUATION	40 dB Min
RIPPLE	2.0 dB Max
INSERTION LOSS	6.0 dB Max