SURFACE ACOUSTIC WAVE FILTER

1. APPLICATION: TV IF FILTER

2. SYSTEM: M / N

3. MODEL: VTF94503M

4. ELECTRICAL CHARACTERISTICS

4-1 Insertion Loss: 41.25 MHz STD 2 dB

4-2 Attenuation (ref. : 41.25 MHz):

fp - 6.0	39.75 MHz	-43.0 dB Max.
fp - 4.5	41.25 MHz	0 dB Max.
fp - 3.58	42.17 MHz	-24.0 dB Max.
fp	45.75 MHz	-43.0 dB Max.
fp + 1.5	47.25 MHz	-43.0 dB Max.

4-3 Amplitude ripple within passband: 0.5 dB Max.

4-4 Outband Rejection:

35.00 to 39.75 MHz	-37.0 dB Max.
47.25 to 55.00 MHz	-37.0 dB Max.

4-5 Impedance at 41.25 MHz

Input: $Z_{in} = R_{in} // C_{in}$	0.4K //14.7pF
Output: $Z_{in} = R_{in} // C_{in}$	1.0K //3.6pF

4-6 Temperature Cofficient Of Center Frequency: -75 ppm/ Max.

4-7 Maximum DC Voltage: 10V DC.

4-8 Operating Temperature Range: -10 to +70

4-9 Storage Temperature Range: -20 to +80

5. RELIABILITY TEST

5-1 Mechanical Shock
The components shall remain within the electrical specifications after 1000 shocks, acceleration 392 m/s^2, duration 6 milliseconds.

5-2 Vibration Fatigue
The components shall remain within the electrical specifications after loaded vibration of 600 rpm to 3300 rpm, amplitude 1.5 mm, x, y, z, direction for 2 hours.

5-3 Terminal Strength
The components shall remain within the electrical specifications after pulled 2 kgs weight for 10 seconds towards an axis of each terminal.

5-4 High Temperature Storage
The components shall remain within the electrical specifications after being Kept at the
85 ambient temperature for 96 hours, then kept at room temperature for 2 hours.

5-5 Low Temperature Storage
The components shall remain within the electrical specifications after being kept at the

-25 for 96 hours, then kept at room temperature for 2 hours.

5-6 Humidity Test

The components shall remain within the electrical specifications after being kept at the condition of ambient temperature 40 , and 90 to 95% RH for 96 hours, then kept at room temperature and normal humidity for 2 hours.

5-7 Thermal Shock

The components shall remain within the electrical specifications after 10 cycles of Heat- Cycles-Testing (one cycle: -25 for 20 minutes, then 85 for 20 minutes), then kept at room temperature for 2 hours.

5-8 Solder-heat Resistance

The components shall remain within the electrical specifications after dipped in the solder at 260 for 10 1 seconds, then kept at room temperature for 2 hours. (Terminal must be dipped leaving 1.5 mm from the case.)

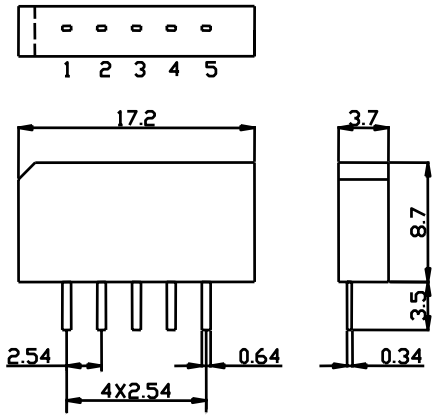
5-9 Solder ability

Solder ability of terminals shall be kept at more than 90% after dipped in the solder flux at 235 5 for 2 0.5 seconds.

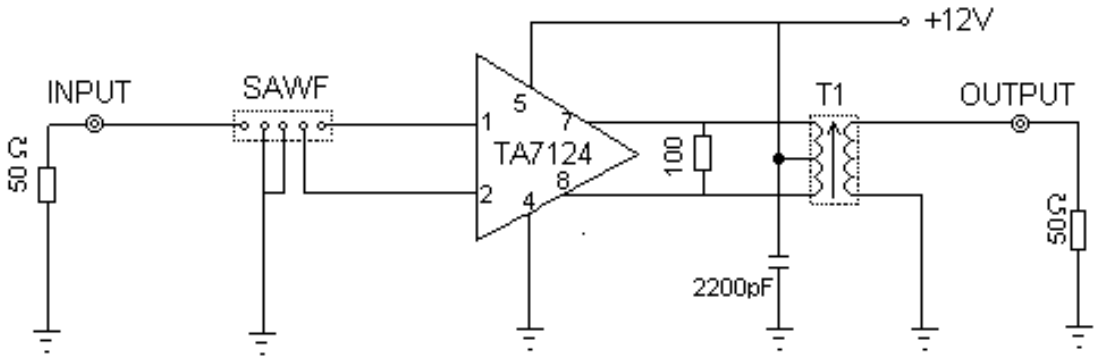
6. PACKAGE DIMENSION

Unit: mm

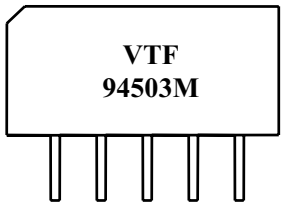
1. INPUT
2. INPUT-GROUND
3. GROUND
4. OUTPUT
5. OUTPUT



7. MEASUREMENT CIRCUIT

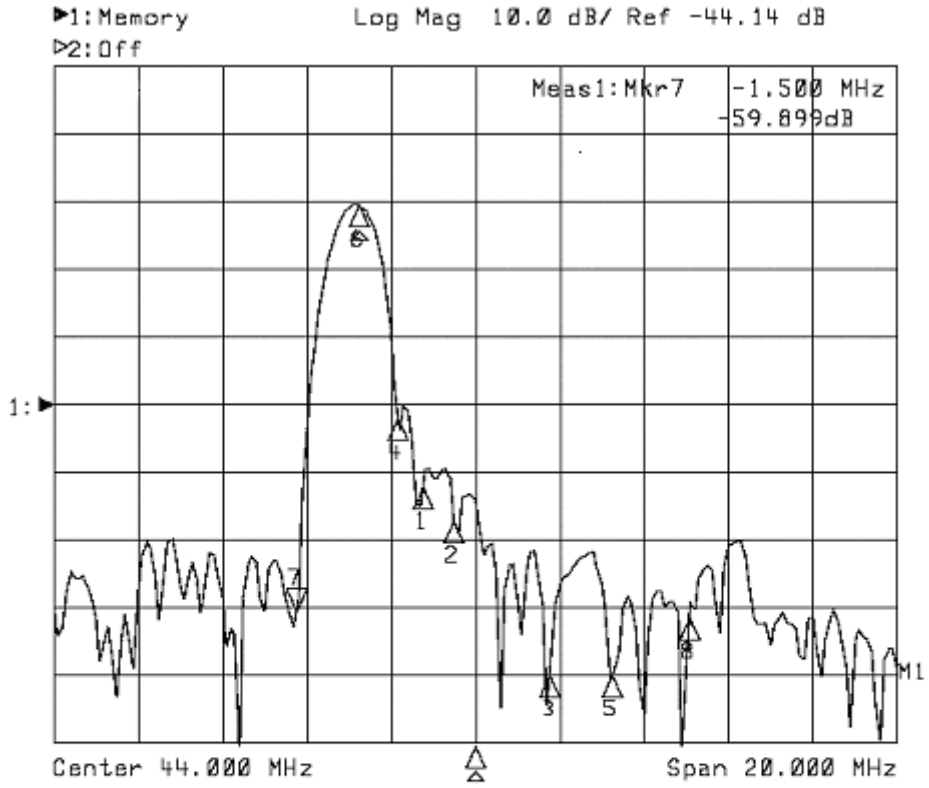


8.MARKING



VTF94503M Model
1 Pin No.1

9. FREQUENCY RESPONSE



1:Mkr Δ(MHz)	dB	2:Mkr (MHz)	dB
1: 1.5000	-41.693		
2: 2.2500	-46.580		
3: 4.5000	-69.442		
4: 0.9200	-31.352		
5: 6.0000	-69.432		
6: 0.0000	0.000		
7› -1.5000	-59.899		
8: 7.8233	-60.971		