

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 Coefficient 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.)

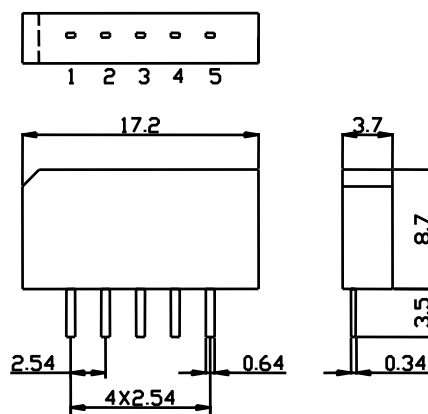
5-9 Solder ability

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.

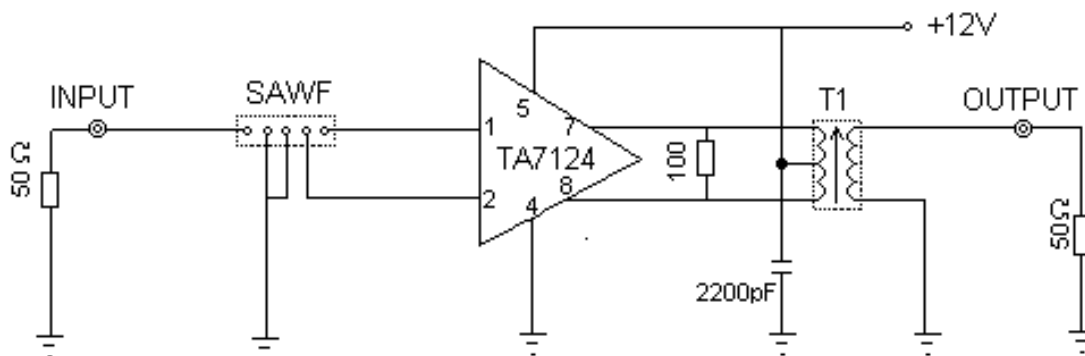
6. PACKAGE DIMENSION

Unit: mm

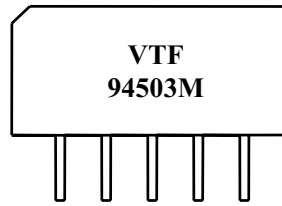
- 1. INPUT
- 2. INPUT-GROUND
- 3. GROUND
- 4. OUTPUT
- 5. OUTPUT



7. MEASUREMENT CIRCUIT



8. MARKING



VTF94503M Model
1 Pin No.1

9. FREQUENCY RESPONSE

