

SURFACE ACOUSTIC WAVE FILTER

1. APPLICATION: TV IF FILTER

2. SYSTEM: B/G, D/K, I, L/L'

3. MODEL: VTF938908D

4. ELECTRICAL CHARACTERISTICS

4-1 Electrical Characteristics in L' Mode (Input channel 1)

Insertion Loss: 40.4MHz 30.6 2dB

Relative Attenuation:

32.4 MHz	-34.0 dB Max.
33.9 MHz	-37.0 dB Max.
38.4 MHz	-26.0 dB Max.
39.75 MHz	0.5±1.5 dB.
40.4 MHz	0dB
41.9 MHz	-25.0 dB Max.

Outband Rejection:

25.00 MHz to 33.9 MHz -32.0 dB Max.

41.9 MHz to 45.00 MHz -25.0 dB Max.

Input: $Z_{in} = R_{in} \parallel C_{in}$ 0.8 || 9.5 K Ω || pF

Output: $Z_{out} = R_{out} \parallel C_{out}$ 2.9 || 4.8 K Ω || pF

4-2 Electrical Characteristics in B/G D/K I L Mode (Input channel 2)

Insertion Loss: 33.4 MHz 30.7 2 dB

Relative Attenuation:

30.90 MHz	-35.0 dB Max.
31.90 MHz	-9.0±3.0 dB.
32.40 MHz	-0.8±2.0 dB.
32.90 MHz	0.1±2.0 dB.
33.05 MHz	0.1±2.0 dB.
34.47 MHz	-23.0 dB Max.
38.90 MHz	-30.0 dB Max.
40.40 MHz	-35.0 dB Max.
40.90 MHz	-32.0 dB Max.
41.40 MHz	-35.0 dB Max.

Outband Rejection:

25.00 MHz to 30.90 MHz -35.0 dB Max.

40.40 MHz to 45.00 MHz -32.0 dB Max.

Input: $Z_{in} = R_{in} \parallel C_{in}$ 0.9 || 13.5 K Ω || pF

Output: $Z_{out} = R_{out} \parallel C_{out}$ 2.8 || 4.8 K Ω || pF

4-3 Temperature Coefficient of Center Frequency: -75 ppm/ Max.

4-4 Maximum DC voltage: 10V DC.

4-5 Operating Temperature Range: -10 to +70

4-6 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/s², 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 Lowest 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 Shocks

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 Resistances

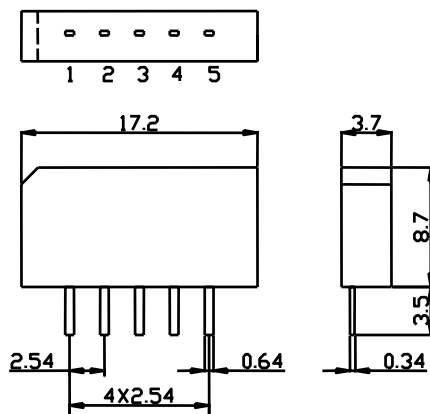
The components shall remain within the electrical specifications after dipped in the solder at 260 for 10 1 seconds, then kept at room temperature for 2 hours.
(Terminal must be dipped leaving 1.5 mm from the case.)

5-9 Solderability

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

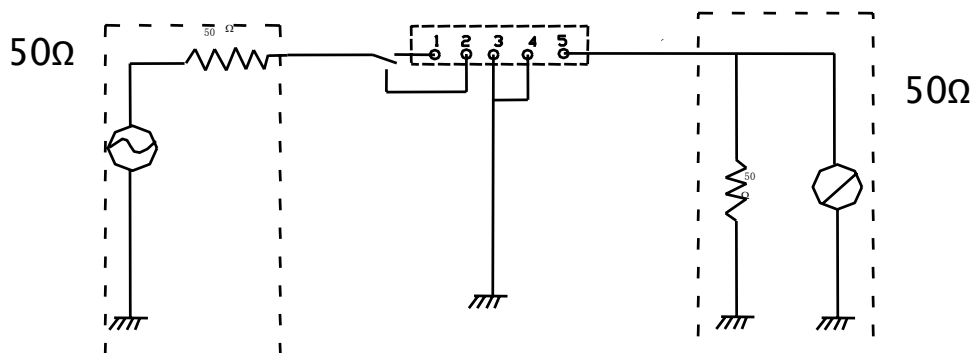
6. PACKAGE DIMENSION

Unit: mm

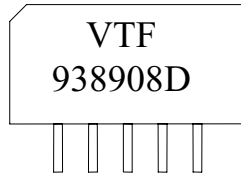


1. INPUT CHANNEL 1 / INPUT GROUND
2. INPUT GROUND / INPUT CHANNEL 2
3. GROUND
4. OUTPUT
5. OUTPUT

7. MEASUREMENT CIRCUIT



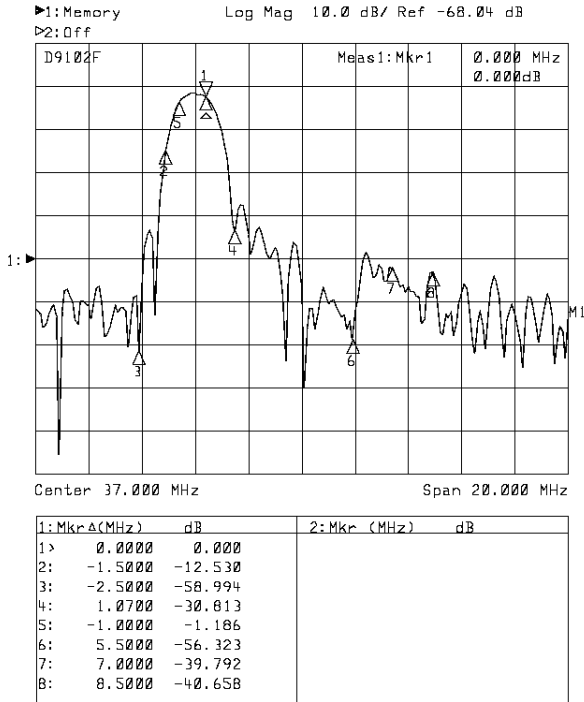
8. MARKING



VT938908D . Model
1 . Pin 1

9. FREQUENCY RESPONSE

CHANNEL2



CHANNEL1

