

## SURFACE ACOUSTIC WAVE FILTER

1. APPLICATION: TV IF FILTER

2. SYSTEM: D/K, B/G, M/N

3. MODEL: VTF738901M

#### 4. ELECTRICAL CHARACTERISTICS

4-1 Characteristics in D/K, B/G Mode (switching pin 2 connected to ground )

Insertion Loss:	37.40Hz	STD 2dB
Relative Attenuation:		
fp-8	30.90 MHz	-43.0 dB Max.
fp-7	31.90 MHz	-36.0 dB Max.
fp-5	32.40 MHz	-19.5 2.0 dB
fp-4	33.40 MHz	-17.2 2.0 dB
fp-2.93	34.47 MHz	-1.0 2.0 dB
fp	38.90 MHz	-5.6 1.0 dB
fp+1.5	40.40 MHz	-40.0 dB Max.
fp+2.5	41.40 MHz	-39.0 dB Max.
Outband Rejection:		
25.00 MHz to 30.90 MHz		-35.0 dB Max.
40.40 MHz to 45.00 MHz		-33.0 dB Max.

4-2 Characteristics in M/N Mode (switching pin 2 connected to pin 1)

Insertion Loss:	37.40 MHz	STD 2 dB
Relative Attenuation:		
fp-6	32.90 MHz	-39.0 dB Max.
fp-4.5	34.40 MHz	-17.0 2.0 dB
fp-3.58	35.32 MHz	-0.6 2.0 dB
fp	38.90 MHz	-6.8 2.0 dB
fp+1.5	40.40 MHz	-40.0 dB Max.
Outband Rejection:		
25.00 MHz to 32.90 MHz		-35.0 dB Max.
40.40 MHz to 45.00 MHz		-30.0 dB Max.

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  $392 \text{ m/s}^2$ , 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.)

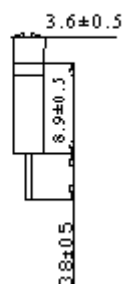
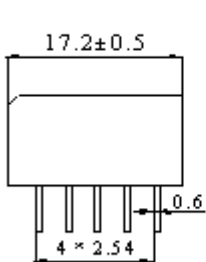
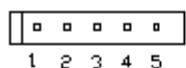
### 5-9 Solderability

Solderability of terminals shall be kept at more than 90% after dipped in the solder flux

at 235 5 for 2 0.5 seconds.

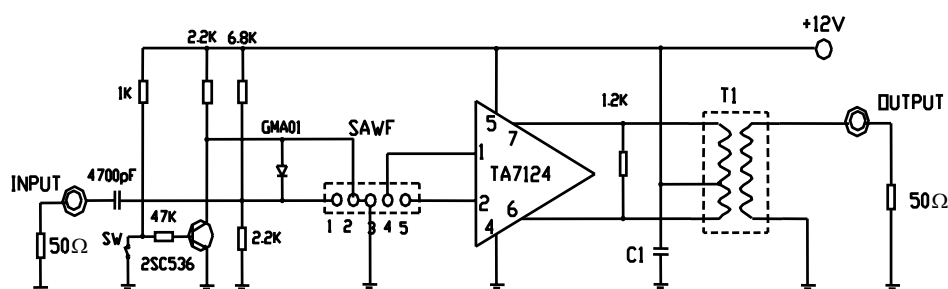
## 6. PACKAGE DIMENSION

Unit: mm

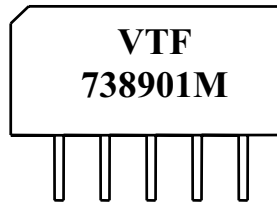


1. INPUT
2. SWITCHING INPUT
3. GROUND
4. OUTPUT
5. OUTPUT

## 7. MEASUREMENT CIRCUIT



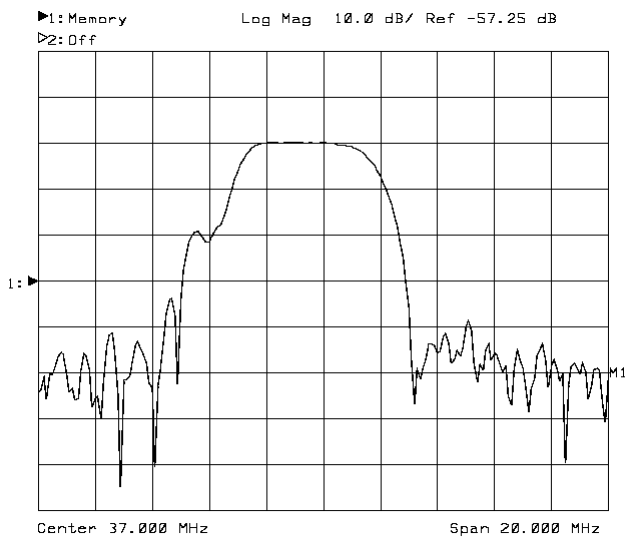
8. MARKING



VTF738901M MODEL  
1 . Pin 1

9. FREQUENCY RESPONSE

D/K B/G CHANNEL



M/N CHANNEL

