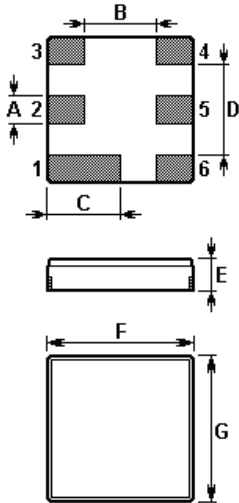


# SAW FILTER

Part Number: VTF15751

The **VTF15751** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) RF filter in a surface-mount ceramic **DCC6C** case designed for GPS applications.

## 1. Package Dimensions (DCC6C)



Pin	Configuration
2	Input / Output
5	Output / Input
1, 3, 4, 6	Case Ground

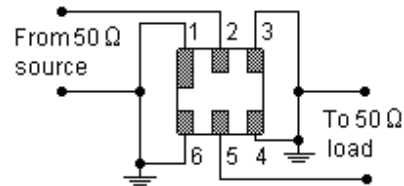
Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	0.6	E	1.1
B	1.5	F	3.0
C	1.5	G	3.0
D	1.8		

## 2. Marking

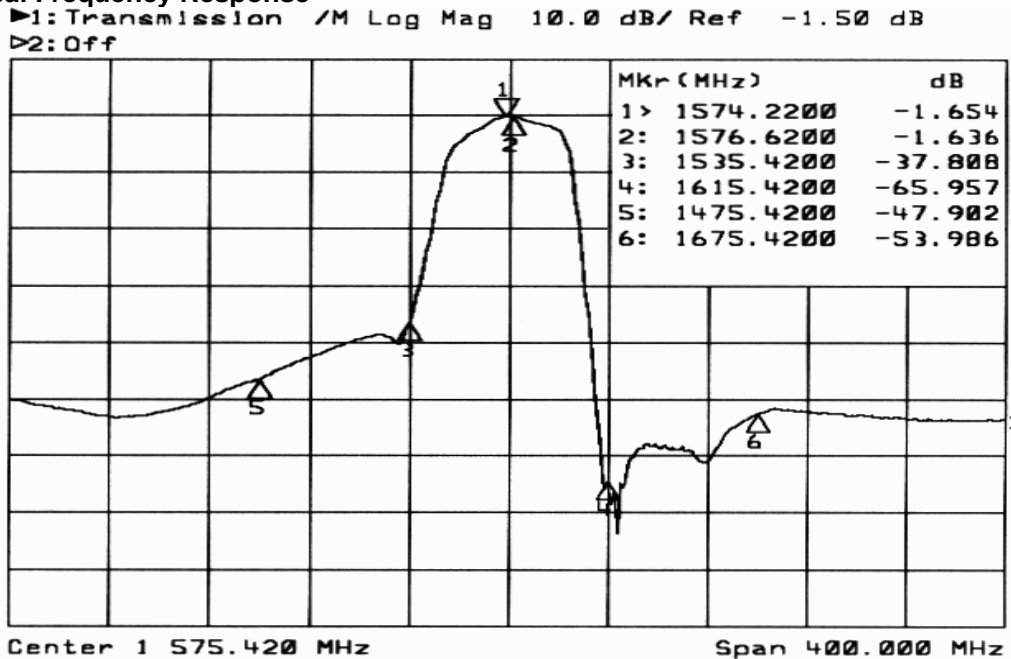
**VTF  
15751**

Laser Marking

## 3. Test Circuit



## 4. Typical Frequency Response



## 5. Performance

### 5-1. Maximum Ratings

Rating		Value	Unit
Input Power Level	$P$	10	dBm
DC Voltage	$V_{DC}$	0	V
Operable Temperature Range	$T_A$	-10 to +65	°C
Storage Temperature Range	$T_{stg}$	-40 to +85	°C

### 5-2. Electronic Characteristics

Characteristic		Min.	Typ.	Max.	Unit
Center Frequency	$f_C$		1575.420		MHz
Insertion Loss	$IL$	--	1.6	3.5	dB
	1574.220 .... 1576.620 MHz				
Amplitude Ripple (p-p)		--	0.3	1.5	dB
	1574.220 .... 1576.620 MHz				
Absolute Attenuation	$\alpha$				dB
	1475.42 MHz	38	45	--	
	1535.42 MHz	30	38	--	
	1615.42 MHz	50	66	--	
	1675.42 MHz	45	54	--	
Group Delay	$\tau$		25	30	ns
	1574.220 .... 1576.620 MHz				
Group Delay Ripple (p-p)	$\Delta \tau$		2.0	5.0	ns
	1574.220 .... 1576.620 MHz				
VSWR				2.0	dB
	1574.220 .... 1576.620 MHz				
Input / Output Impedance		50			$\Omega$

**ⓘ CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!**

1. The frequency  $f_C$  is defined as the midpoint between the 3dB frequencies.
2. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50 $\Omega$  test system with VSWR $\leq$ 1.2:1. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency,  $f_C$ . Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.
3. Unless noted otherwise, specifications apply over the entire specified operating temperature range.
4. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
5. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
6. Our liability is only assumed for the Surface Acoustic Wave (SAW) component(s) per se, not for applications, processes and circuits implemented within components or assemblies.
7. For questions on technology, prices and delivery, please contact our sales offices or e-mail [info@v-torch.com](mailto:info@v-torch.com)