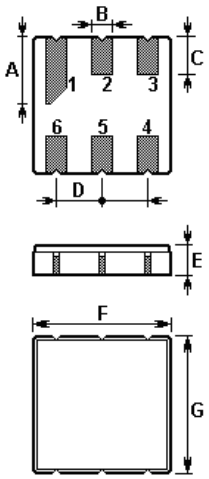
V.TORCH
Electronics Limited

SAW FILTER

Part Number：VTF24302

The **VTF24302** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) filter in a surface-mount ceramic **DCC6** case using as IF filter for PHS handset phone selectivity in **243.950** MHz receivers.

1. Package Dimension (DCC6)



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

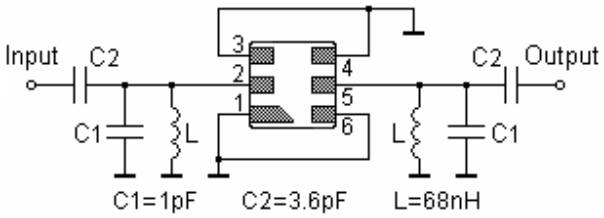
Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	1.90±0.1	E	1.35±0.15
B	0.64±0.1 (x6)	F	3.80±0.15
C	1.00±0.1 (x5)	G	3.80±0.15
D	1.27±0.1 (x4)		

2. Marking

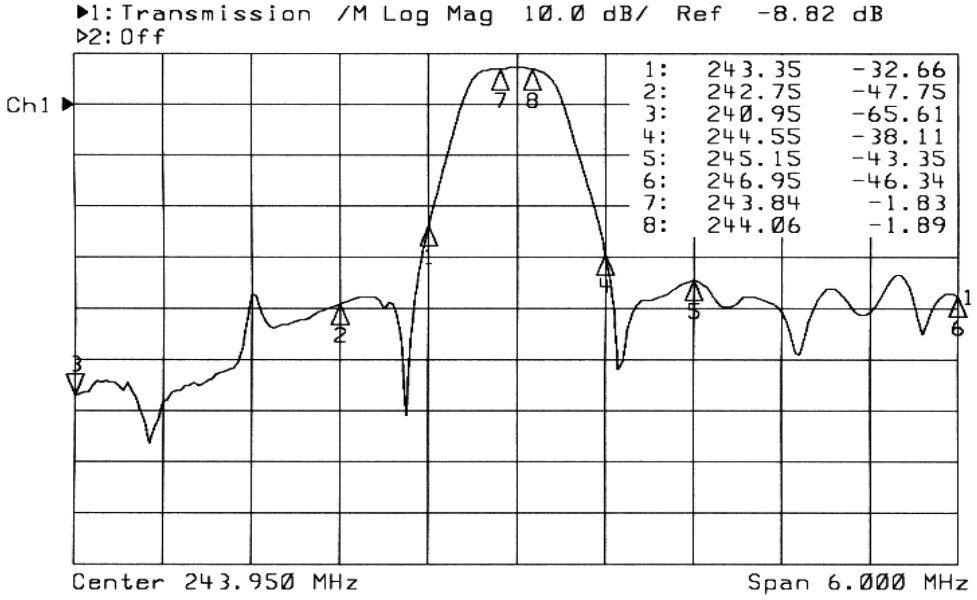
VTF
24302

Laser Marking

3. Test Circuit



4. Frequency Characteristics



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5. Performance

5-1. Maximum Ratings

Rating		Value	Unit
Input Power Level	P	10	dBm
DC Voltage	V_{DC}	12	V
Storage Temperature Range	T_{stg}	-40 to +85	℃
Operable Temperature Range	T_A	-10 to +65	℃

5-2. Electronic Characteristics

Characteristic			Min.	Typ.	Max.	Unit
Center Frequency (center frequency between 3dB points)		f_C		243.950		MHz
Insertion Loss (f_C±110kHz)		IL	--	2.0	4.0	dB
3dB Passband		BW_{3dB}		585		kHz
Amplitude Ripple				0.1	1.0	dB
Group Delay Ripple				0.28	1.0	us
Rejection	f_C−21.6MHz		60	--	--	dB
	f_C− 1.2MHz		40	--	--	
	f_C− 0.6MHz		25	35	--	
	f_C+ 0.6MHz		25	33	--	
	f_C+ 1.2MHz		38	45	--	
	f_C+21.6MHz		55	--	--	
Frequency Temperature Coefficient		FTC		0		ppm/℃^{2}

ⓘ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 50Ω test system with VSWR≤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