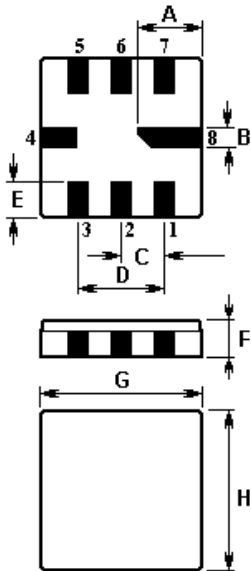


SAW FILTER

Part Number: VTF240155

The **VTF240155** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) filter in a surface-mount ceramic **QCC8C** case for broadband applications.

1. Package Dimension (QCC8C)



Pins	Configuration
2	Input Ground
3	Input
6	Output Ground
7	Output
1,5	To be Grounded
4,8	Case Ground

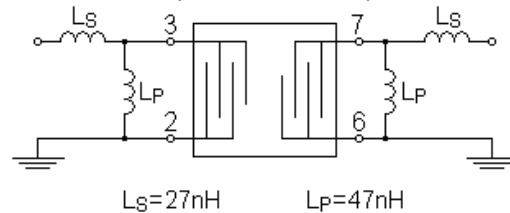
Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	2.08	E	1.20
B	0.60	F	1.35
C	1.27	G	5.00
D	2.54	H	5.00

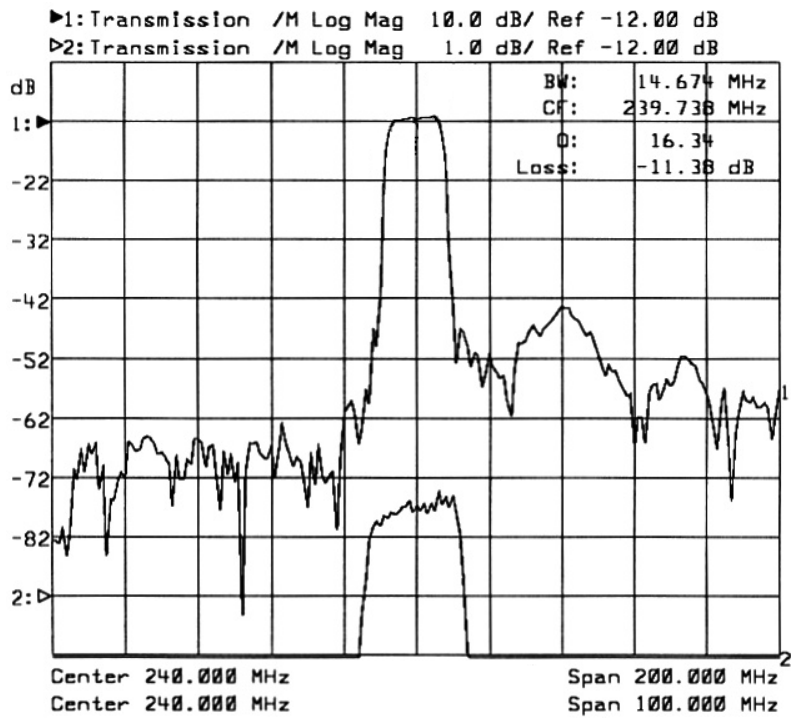
2. Marking

VTF
240155
Laser Marking

4. Typical Frequency Response

3. Test Circuit (50Ω unbalance)





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 +60	°C
Storage Temperature Range	T_{stg}	-40 to +85	°C

5-2. Electronic Characteristics

Parameter		Minimum	Typical	Maximum	Unit
Center Frequency	f_C	--	240.000	--	MHz
Minimum Insertion Loss at 240.0 MHz	IL		11	14	dB
3dB Bandwidth	BW_3	--	13	--	MHz
40dB Bandwidth	BW_{40}	--	26	--	MHz
Relative Attenuation	α_{rel}				
200.00 226.00 MHz		--	45	--	dB
255.00 280.00 MHz		--	40	--	dB
280.00 300.00 MHz		--	45	--	dB
Passband Ripple	$\Delta \alpha$				
236.15 243.85 MHz		--	0.7	--	dB
Phase Linearity					
236.15 243.85 MHz		--	5	--	deg
Group Delay Variation	$\Delta \tau$				
236.15 243.85 MHz		--	35	--	ns
Temperature Coefficient of Frequency	TC_f		-94		ppm/°C
Input / Output Impedance (Nominal)		50 Ω			
Substrate Material		YZ LiNbO ₃			

ⓘ 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 Ω 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