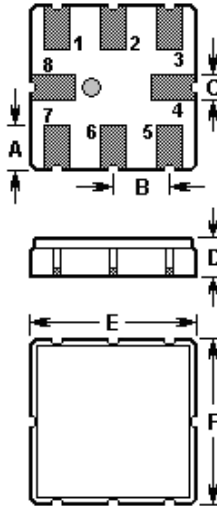


SAW FILTER

Part Number: VTF86836

The **VTF86836** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) filter in a surface-mount ceramic **QCC8B** case to provide front-end selectivity in **868.350** MHz receivers.

1. Package Dimension (QCC8B)



Pin	Configuration
1	Input
2	Input Ground
5	Output
6	Output Ground
3, 7	Ground
4, 8	Case Ground

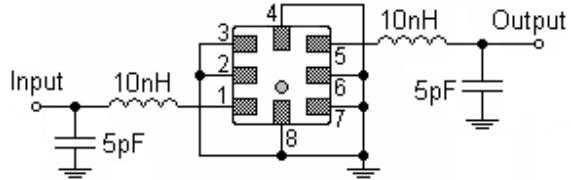
Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	1.00	D	1.50
B	1.27	E	3.80
C	0.60	F	3.80

2. Marking

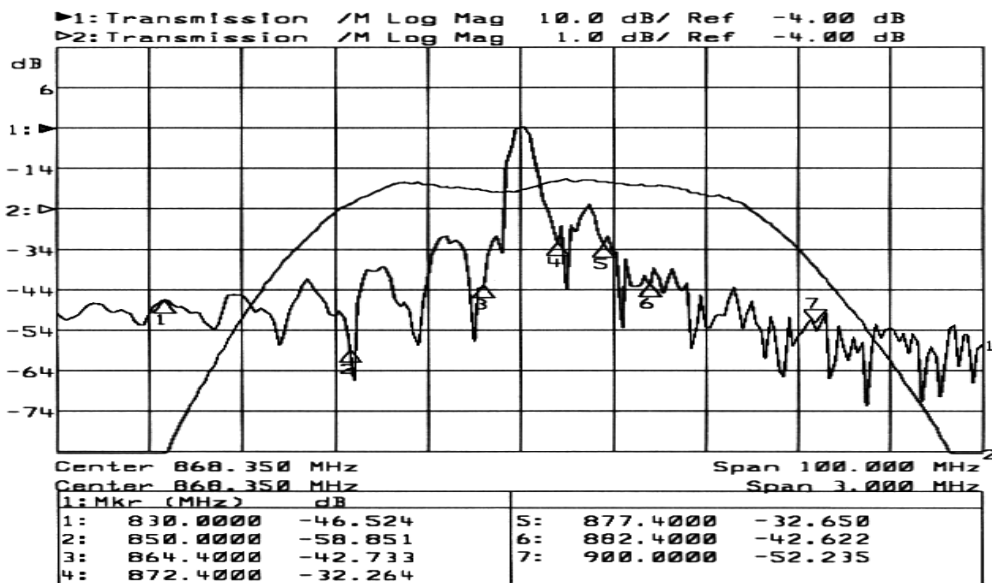
VTF
86836

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}	12	V
Storage Temperature Range	T_{stg}	-40 to +85	°C
Operable Temperature Range	T_A	-40 to +85	°C

5-2. Electronic Characteristics

Characteristic		Minimum	Typical	Maximum	Unit
Center Frequency @25°C	f_C		868.350		MHz
Insertion Loss	IL	--	3.5	4.8	dB
3dB Bandwidth	BW_3		1800		kHz
Attenuation: (relative to IL_{min})	10.0 ... 700.0 MHz	50	55		dB
	700.0 ... 830.0 MHz	38	43		
	830.0 ... 850.0 MHz	32	38		
	850.0 ... 864.4 MHz	22	27		
	872.4 ... 877.4 MHz	16	20		
	877.4 ... 882.4 MHz	24	28		
	882.4 ... 900.0 MHz	28	35		
900.0 ... 1000.0 MHz	40	45			
Temperature Frequency Temperature Coefficient	FTC		0.032		ppm/°C ²
Frequency Aging Absolute Value during the First Year	$ fA $		10		ppm/yr

ⓘ 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.
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.

For questions on technology, prices and delivery, please contact our sales offices or e-mail info@v-torch.com