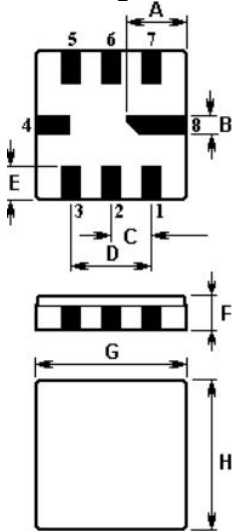


SAW FILTER

Part Number : VTF43305

The VTF43305 is a low-loss, compact, and economical surface-acoustic-wave (SAW) filter in a surface-mount ceramic QCC8C case designed to provide front-end selectivity in 433.920 MHz receivers. Receiver designs using this filter include superhet with 10.7 MHz or 500 kHz IF, direct conversion and superregen.

1. Package Dimension (QCC8C)



Pin	Connection
1	Input Ground
2	Input
5	Output
6	Output Ground
3, 7	to be Grounded
4, 8	Case Ground

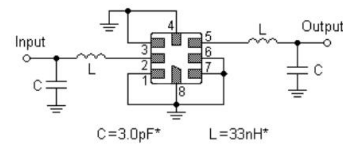
Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	2.08	E	1.20
B	0.60	F	1.35
C	1.27	G	5.00
D	2.54	H	5.00

2. Marking

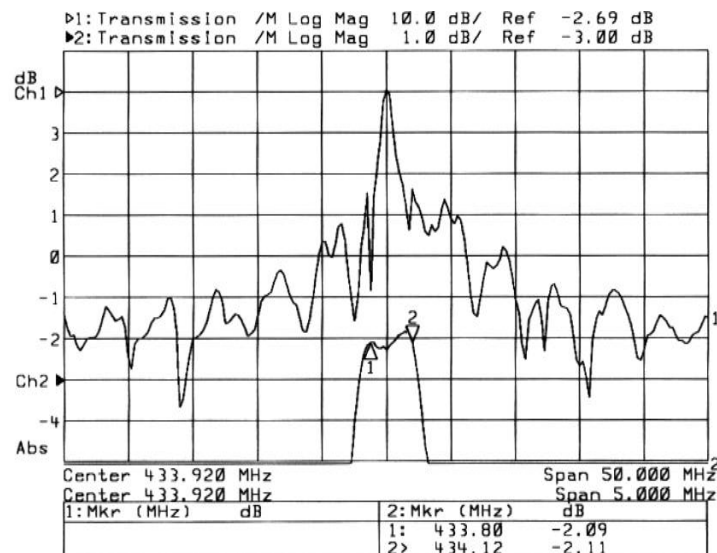
VTF
43305

Laser Marking

3. Test Circuit



4. Typical Frequency Response



5. Performance

5-1. Maximum Ratings

Rating		Value	Unit
Input Power Level	P_{in}	10	dBm
DC Voltage	V_{DC}	12	V
Storage Temperature Range	T_{stg}	-40 to +85	°C
Operating Temperature Range	T_A	-10 to +60	°C

5-2. Electronic Characteristics

Characteristic		Minimum	Typical	Maximum	Unit
Center Frequency (center frequency between 3dB points)	f_c	--	433.920	--	MHz
Insertion Loss 433.80 434.12 MHz	IL	--	2.5	4.0	dB
3dB Pass bandwidth (relative to IL)	BW_3	500		750	kHz
Pass band (relative to IL) 433.76 434.08 MHz		--	--	2.0	dB
433.74 434.10 MHz		--	--	3.0	dB
433.68 434.16 MHz		--	--	6.0	dB
Relative attenuation (relative to IL) 414.00 428.00 MHz		40	45	--	dB
428.00 432.84 MHz		15	25	--	dB
434.92 442.00 MHz		10	20	--	dB
442.00 550.00 MHz		33	38	--	dB

ⓘ 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 $VSWR \leq 1.2:1$. 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@vtorch.ca