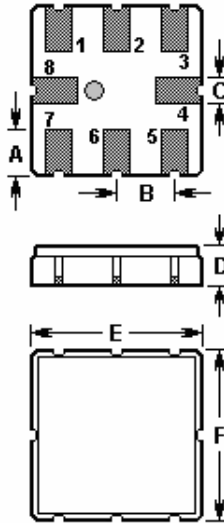


The **ACTF8095,868.3,QCC8B** is a low-loss, compact, and economical surface-acoustic-wave (SAW) filter in a surface-mount ceramic **QCC8B** case to provide front-end selectivity in **868.300 MHz** receivers.

1. Package Dimension (QCC8B)



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

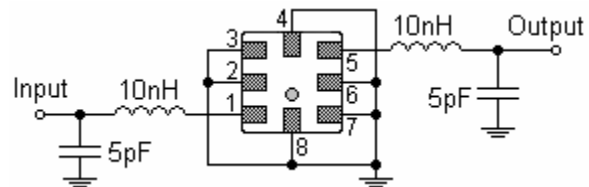
Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	1.00	D	1.50
B	1.27	E	3.80
C	0.60	F	3.80

2. Marking

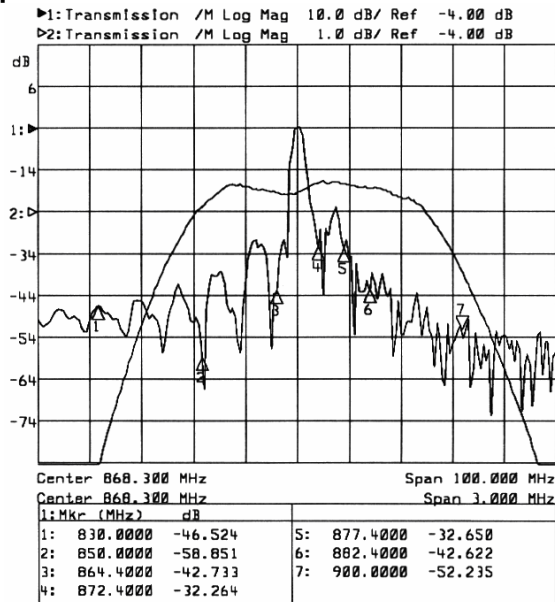


Laser Printing, Top View

3. Test Circuit



4. Typical Frequency Response



In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice

ISO9001:2000 Registered

For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

5. Performance

5-1. Maximum Ratings

Rating		Value	Unit
Input Power Level	P	10	dBm
DC Voltage	V_{DC}	10	V
Storage Temperature Range	T_{stg}	-45 to +125	°C
Operable Temperature Range	T_A	-45 to +125	°C

5-2. Electronic Characteristics

Reference Temperature: $T_A = -45^{\circ}\text{C}$ to $+120^{\circ}\text{C}$

Terminating Source Impedance: $Z_S = 50\ \Omega$ and matching network

Terminating Load Impedance: $Z_L = 50\ \Omega$ and matching network

Characteristic		Minimum	Typical	Maximum	Unit	
Center Frequency @25°C	f_C		868.300		MHz	
Insertion Loss	868.00 ... 868.60MHz	IL	--	3.3	4.5	dB
3dB Bandwidth		BW_3	1800			kHz
Attenuation: (relative to IL_{min})	10.0 ... 700.0 MHz	α_{rel}	50	55	dB	
	700.0 ... 830.0 MHz		38	43		
	830.0 ... 850.0 MHz		32	38		
	850.0 ... 863.9 MHz		22	27		
	871.9 ... 876.9 MHz		16	20		
	876.9 ... 881.9 MHz		24	28		
	881.9 ... 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!

NOTE:

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.

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