

- **Designed to Band Pass in 433.92 MHz**
- **Low-Loss, Coupled-Resonator Quartz Design**
- **Simple External Impedance Matching**
- **Ultra Miniature Ceramic QCC8C SMD Package**
- **Complies with Directive 2002/95/EC (RoHS Compliant)**

SF5507

Absolute Maximum Rating (Ta=25°C)			
Parameter		Rating	Unit
Input Power Level	P_{in}	10	dBm
DC Voltage VDC Between Any Two Pins	V_{DC}	12	V
Operating Temperature Range	T_A	-10 ~ +60	°C
Storage Temperature Range	T_{stg}	-40 ~ +85	°C

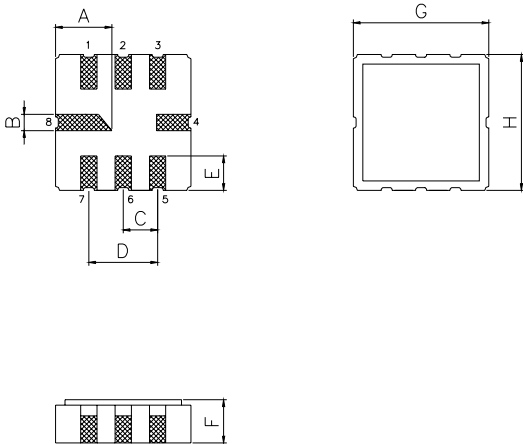
Electronic Characteristics						
Parameter		Sym	Minimum	Typical	Maximum	Unit
Nominal Frequency (at 25°C) (Center frequency between 3dB point)		f_c	NS	433.92	NS	MHz
Insertion Loss Attenuation	431.92 ... 435.92 MHz	IL	-	3.5	5.0	dB
Usable Bandwidth		BW	-	±2.0	-	MHz
3dB Passband		BW_3	-	±4.0	-	MHz
Passband Ripple	431.92 ... 435.92 MHz	$\Delta\alpha$	-	-	±1.0	dB
Absolute Attenuation	DC ... 403.92 MHz	α_{rel}	40	50	-	dB
	463.92 ... 633.92 MHz		45	55	-	dB
Frequency Aging	Absolute Value during the First Year	$ fA $	-	-	10	ppm/yr
DC Insulation Resistance Between any Two Pins		-	1.0	-	-	MΩ
Input / Output Impedance (nominal)		-	-	50	-	Ω

NS = Not Specified

Notes:

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 sales@vanlong.com.

Package Dimensions (QCC8C)



Electrical Connections

Terminals	Connection
1	Input / Output Ground
2	Input / Output
5	Output / Input Ground
6	Output / Input
3,7	To be Grounded
4,8	Case Ground

Package Dimensions

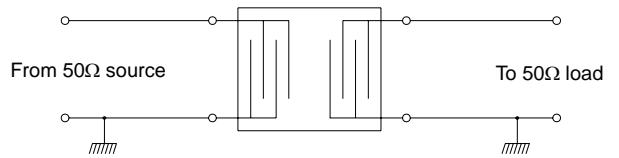
Dimensions	Nom (mm)	Dimensions	Nom (mm)
A	2.08	E	1.20
B	0.60	F	1.35
C	1.27	G	5.00
D	2.54	H	5.00

Marking



1. F5507 - Part Code
2. Frequency (MHz) in 5 digits
3. Date Code:
 Y : Last digit of year
 WW : Week No.

Test Circuit



Typical Frequency Response

