

- **Ideal for Wireless LAN applications**
- **Low-Loss, Coupled-Resonator Quartz Design**
- **Simple External Impedance Matching**
- **Ultra Miniature Ceramic QCC8C SMD Package**

SF5302

Absolute Maximum Rating (Ta=25°C)		
Parameter	Rating	Unit
Source Power P	10	dBm
DC Voltage VDC Between Any Two Pins V_{DC}	0	V
Operating Temperature Range T_A	-10 ~ +60	°C
Storage Temperature Range T_{stg}	-40 ~ +85	°C

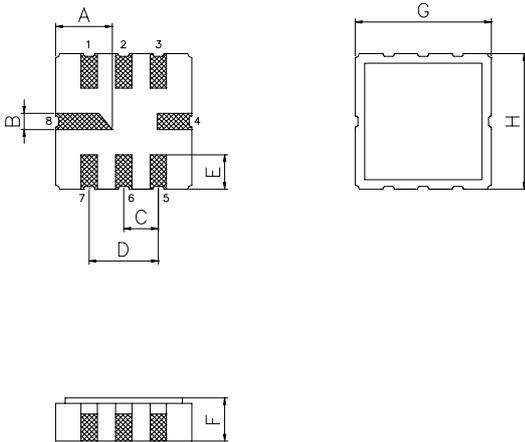
Electronic Characteristics					
Parameter	Sym	Minimum	Typical	Maximum	Unit
Nominal Frequency (at 25°C) (Center frequency between 3dB point)	f_c	NS	280.00	NS	MHz
Insertion Loss (including matching network)	IL	-	11.0	13.5	dB
3dB Passband	BW_3	16	20	-	MHz
Amplitude Ripple (p-p) $f_c \pm 7.0$ MHz	$\Delta\alpha$	-	± 0.5	-	dB
Group Delay Ripple (p-p) $f_c \pm 7.0$ MHz	$\Delta\tau$	-	40	100	ns
Relative Attenuation (relative to IL)					
230.00 ... 260.00 MHz	α_{rel}	25	46	-	dB
300.00 ... 330.00 MHz		28	37	-	dB
Temperature coefficient of frequency	FTC	-	-87	-	ppm/K
Frequency Aging Absolute Value during the First Year	$ fA $	-	-	10	ppm/yr
DC Insulation Resistance Between any Two Pins	-	1.0	-	-	MΩ

NS = Not Specified

Notes:

- The frequency f_c is defined as the midpoint between the 3dB frequencies.
- 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.
- Unless noted otherwise, specifications apply over the entire specified operating temperature range.
- The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
- All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
- 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 sales@vanlong.com.

Package Dimensions (QCC8C)



Electrical Connections

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

Package Dimensions

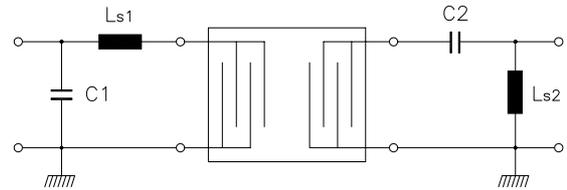
Dimensions	Nom (mm)	Dimensions	Nom (mm)
A	2.08	E	1.20
B	0.60	F	1.35
C	1.27	G	5.00
D	2.54	H	5.00

Marking



- 1. F5302 - Part Code
- 2. Frequency (MHz) in 5 digits
- 3. Date Code:
 Y : Last digit of year
 WW : Week No.

Test Circuit



C1 = 18 pF C2 = 47 pF
 Ls1 = 33 nH Ls2 = 27 nH

Typical Frequency Response

