- ***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:

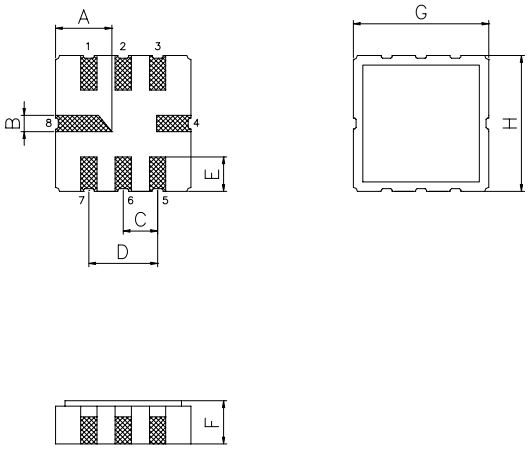
1. The frequency f_C is defined as the midpoint between the 3dB frequencies.
2. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50Ω test system with VSWR ≤ 1.2:1. The test fixture L and C are adjusted for minimum insertion 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.

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280.00 MHz SAW Filter

Package Dimensions (QCC8C)



Electrical Connections

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

Package Dimensions

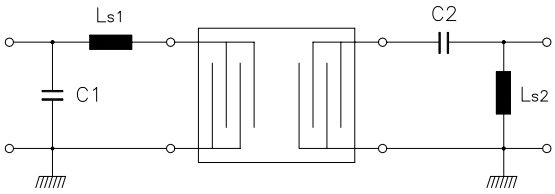
Dimensions	Nom (mm)	Dimensions	Nom (mm)
A	2.08	E	1.20
B	0.60	F	1.35
C	1.27	G	5.00
D	2.54	H	5.00

Marking



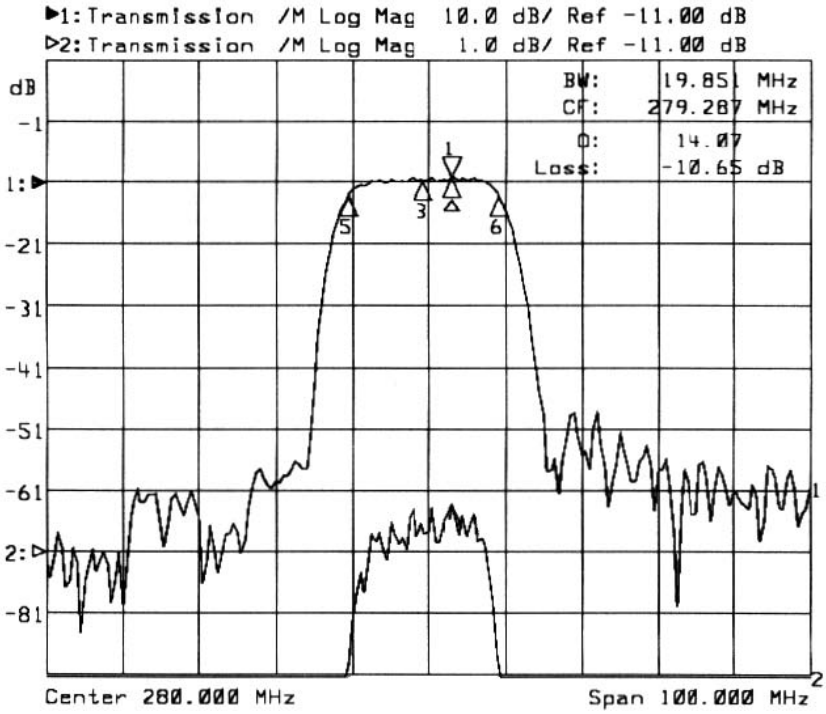
1. F5302 - Part Code
2. Frequency (MHz) in 5 digits
3. Date Code:
   Y : Last digit of year
   WW : Week No.

Test Circuit



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

Typical Frequency Response



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