

- **Designed to Cordless Telephone ISM in 914.00 MHz**
- **Low-Loss, Coupled-Resonator Quartz Design**
- **Simple External Impedance Matching**
- **Ultra Miniature Ceramic QCC8C SMD Package**

**SF5004**

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

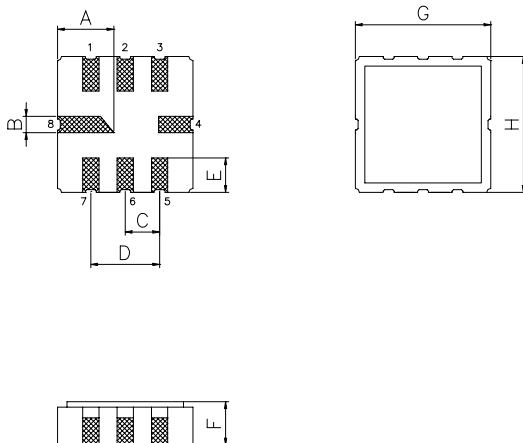
Electronic Characteristics					
Parameter	Sym	Minimum	Typical	Maximum	Unit
Nominal Frequency (at 25°C) (Center frequency between 3dB point)	$f_c$	NS	914.00	NS	MHz
Insertion Loss Attenuation 913.00 ... 915.00 MHz	$IL$	-	3.5	4.5	dB
Usable Bandwidth	$BW$	-	±1.0	-	MHz
Passband Ripple 913.00 ... 915.00 MHz	$\Delta\alpha$	-	0.7	2.0	dB
Absolute Attenuation 958.00 ... 960.00 MHz	$\alpha_{rel}$	30	35	-	dB
Frequency Temperature Coefficient	$FTC$	-	-30	-	ppm/K
Frequency Aging Absolute Value during the First Year	$ f_A $	-	-	10	ppm/yr
DC Insulation Resistance Between any Two Pins	-	1.0	-	-	MΩ
Input / Output Impedance (nominal)	-	-	50	-	Ω

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 ≤ 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)



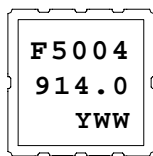
## Electrical Connections

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

## Package Dimensions

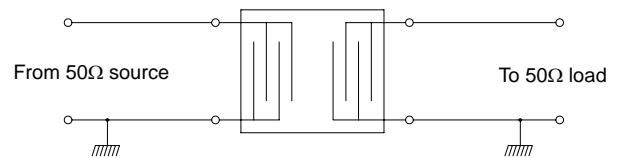
Dimensions	Nom (mm)	Dimensions	Nom (mm)
A	2.08	E	1.20
B	0.60	F	1.35
C	1.27	G	5.00
D	2.54	H	5.00

## Marking



1. F5004 - Part Code
2. Frequency (MHz) in 5 digits
3. Date Code:  
Y : Last digit of year  
WW : Week No.

## Test Circuit



## Typical Frequency Response

