

- **Ideal for DBS Receivers, IF Filter**
- **Constant Group Delay**
- **Improved ESD capability by integrated shunt resistors**
- **Ultra Miniature Ceramic QCC8C SMD Package**
- **Complies with Directive 2002/95/EC (RoHS Compliant)**

SF5512

Absolute Maximum Rating (Ta=25°C)			
Parameter		Rating	Unit
AC Voltage Between Any Two Pins	V_{PP}	5	V
DC Voltage Between Any Two Pins	V_{DC}	0	V
Operating Temperature Range	T_A	-25 ~ +85	°C
Storage Temperature Range	T_{stg}	-40 ~ +85	°C

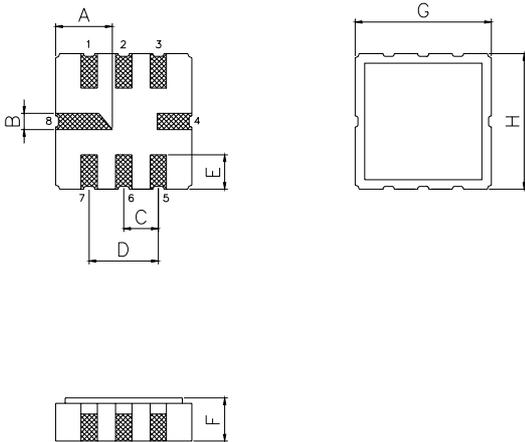
Electronic Characteristics						
Parameter		Sym	Minimum	Typical	Maximum	Unit
Center Frequency (25°C)	Between 3dB point	f_c	NS	480.00	NS	MHz
	Tolerance from 480.00 MHz	Δf_c	-	-	1.0	MHz
Insertion Attenuation		α	-	22.5	24.0	dB
3dB Bandwidth		BW_3	25.60	26.60	27.60	MHz
Relative Attenuation						
	466.50 MHz		-	3.0	4.6	dB
	493.50 MHz	α_{rel}	-	3.2	4.6	dB
Lower Sidelobe	430.00 ... 455.50 MHz		40	46	-	dB
Upper Sidelobe	504.50 ... 530.00 MHz		38	43	-	dB
Reflected Wave Signal Suppression						
	0.1µs ... 2.0µs after main pulse	-	40.0	46.0	-	dB
Amplitude Ripple (p-p)	473.50 ... 486.50 MHz	$\Delta\alpha$	-	0.6	1.0	dB
Group Delay	480.00 MHz	τ	-	227.5	-	ns
Group Delay Ripple (p-p)	467.00 ... 493.00 MHz	$\Delta\tau$	-	8.5	15.0	ns
Temperature Coefficient of Frequency		FTC	-	-86	-	ppm/K

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

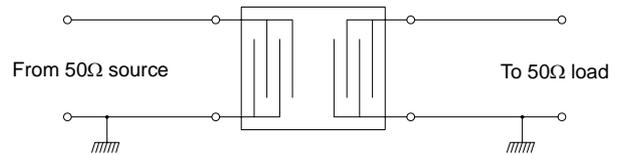
Dimensions	Nom (mm)	Dimensions	Nom (mm)
A	2.08	E	1.20
B	0.60	F	1.35
C	1.27	G	5.00
D	2.54	H	5.00

Marking



1. F5512 - Part Code
2. Frequency (MHz) in 5 digits
3. Date Code:
 Y : Last digit of year
 WW : Week No.

Test Circuit



Typical Frequency Response

