

- Designed to Provide Front-end Selectivity in 419.20 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)

SF5504

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

Electronic Characteristics						
Parameter		Sym	Minimum	Typical	Maximum	Unit
Nominal Frequency (at 25°C)		$f_{\rm C}$	NS	419.20	NS	MHz
(Center frequency between 3dB point)		10				
Insertion Loss Attenuation		IL	-	3.0	4.5	dB
3dB Passband		BW ₃	-	±600	-	KHz
Passband Ripple		-	=	-	1.0	dB
Rejection	At f _C - 21.4 MHz (Image)	-	30	38	-	dB
	At f _C - 10.7 MHz (LO)	-	24	32	-	dB
	Ultimate	-	ı	60	-	dB
Temperature Stability	Operating Temperature Range	T _C	-10	-	+60	°C
	Turnover Temperature	To	25	40	55	°C
	Turnover Frequency	f _O	=	f _C	-	MHz
	Frequency Temperature Coefficient	FTC	-	0.032	-	ppm/C ²
Frequency Aging Absolute Value during the First Year		fA	-	-	10	ppm/yr
DC Insulation Resistance Between any Two Pins		-	1.0	-	-	ΜΩ

NS = Not Specified

Notes:

- 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.
- Unless noted otherwise, specifications apply over the entire specified operating temperature range.
- 4. Frequency aging is the change in $f_{\rm C}$ with time and is specified at +65°C or less. Aging may exceed the specification for prolonged temperatures above +65°C. Typically, aging is greatest the first year after manufacture, decreasing in subsequent years.

- Turnover temperature, T₀, is the temperature of maximum (or turnover) frequency, f₀. The nominal frequency at any case temperature, T_C, may be calculated from: f = f₀ [1 FTC (T₀ T_C)²].
- 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.

Phone: +86 (10) 5820-3910

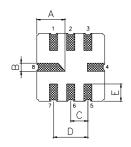
Fax: +86 (10) 5820 3915

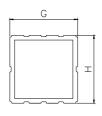
Email: sales@vanlong.com

Web: http://www.vanlong.com



Package Dimensions (QCC8C)







Electrical Connections

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

Package Dimensions

Dimensions	Nom (mm)	Dimensions	Nom (mm)
Α	2.08	Е	1.20
В	0.60	F	1.35
С	1.27	G	5.00
D	2.54	Н	5.00

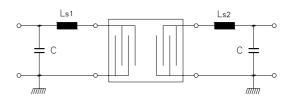
Marking



- 1. F5504 Part Code
- 2. Frequency (MHz) in 5 digits
- 3. Date Code:

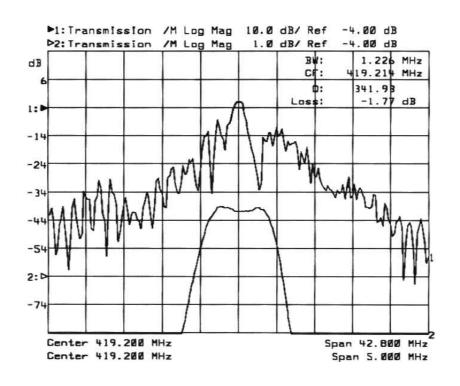
Y : Last digit of year WW : Week No.

Test Circuit



C = 10 pF Ls1 = Ls2 = 6 tunes of 0.5mm insulated copper, 3.0mm ID

Typical Frequency Response



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