

- **Designed to PHS Handset Phone Selectivity in 243.95 MHz**
- **Low-Loss, Coupled-Resonator Quartz Design**
- **Simple External Impedance Matching**
- **Ultra Miniature Ceramic DCC6 SMD Package**

SF5301

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 ~ +65	°C
Storage Temperature Range	T_{stg}	-40 ~ +85	°C

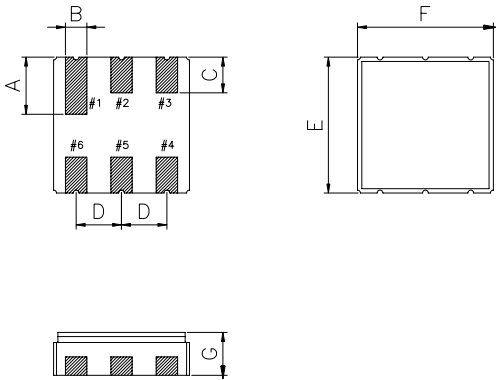
Electronic Characteristics					
Parameter	Sym	Minimum	Typical	Maximum	Unit
Nominal Frequency (at 25°C) (Center frequency between 3dB point)	f_c	NS	243.95	NS	MHz
Insertion Loss Attenuation	IL	-	2.0	4.0	dB
3dB Passband	BW_3	-	585	-	KHz
Amplitude Ripple	α	-	0.1	1.0	dB
Group Delay Ripple	-	-	0.28	1.0	μs
Rejection	at $f_c - 21.6$ MHz	-	60	-	dB
	at $f_c - 1.2$ MHz	-	40	-	dB
	at $f_c - 0.6$ MHz	-	25	35	dB
	at $f_c + 0.6$ MHz	-	25	33	dB
	at $f_c + 1.2$ MHz	-	38	45	dB
	at $f_c + 21.6$ MHz	-	55	-	dB
Frequency Aging Absolute Value during the First Year	$ fA $	-	-	10	ppm/yr
DC Insulation Resistance Between any Two Pins	-	1.0	-	-	M 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 50 Ω 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 (DCC6)



Electrical Connections

Terminals	Connection
2	Input
5	Output
1,3,4,6	Ground

Package Dimensions

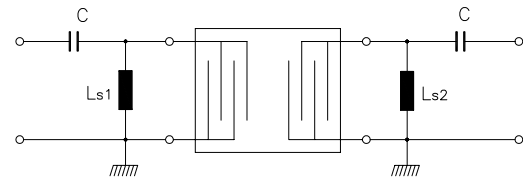
Dimensions	Nom (mm)	Dimensions	Nom (mm)
A	1.90	E	3.80
B	0.64	F	3.80
C	1.00	G	1.20
D	1.27		

Marking



1. F5301 - Part Code
2. Date Code:
 Y : Last digit of year
 WW : Week No.

Test Circuit



C = 3.5 pF
 Ls1 = Ls2 = 64 nH

Typical Frequency Response

