- ***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	$\|f_A\|$	-	-	10	ppm/yr
DC Insulation Resistance Between any Two Pins		-	1.0	-	-	MΩ

NS = Not Specified

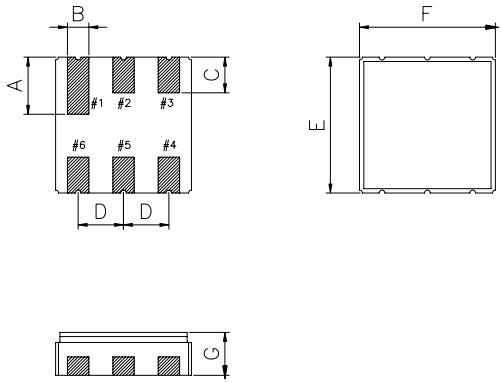
Notes:

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.

Phone: +86 10 6301 4184 Fax: +86 10 6301 9167 Email: sales@vanlong.com Web: http://www.vanlong.com

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Package Dimensions (DCC6)



Electrical Connections

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

Package Dimensions

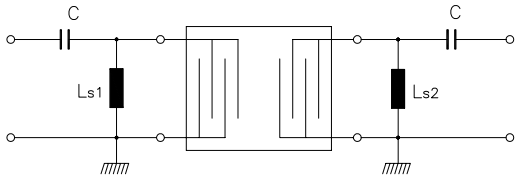
Dimensions	Nom (mm)	Dimensions	Nom (mm)
A	1.90	E	3.80
B	0.64	F	3.80
C	1.00	G	1.20
D	1.27		

Marking



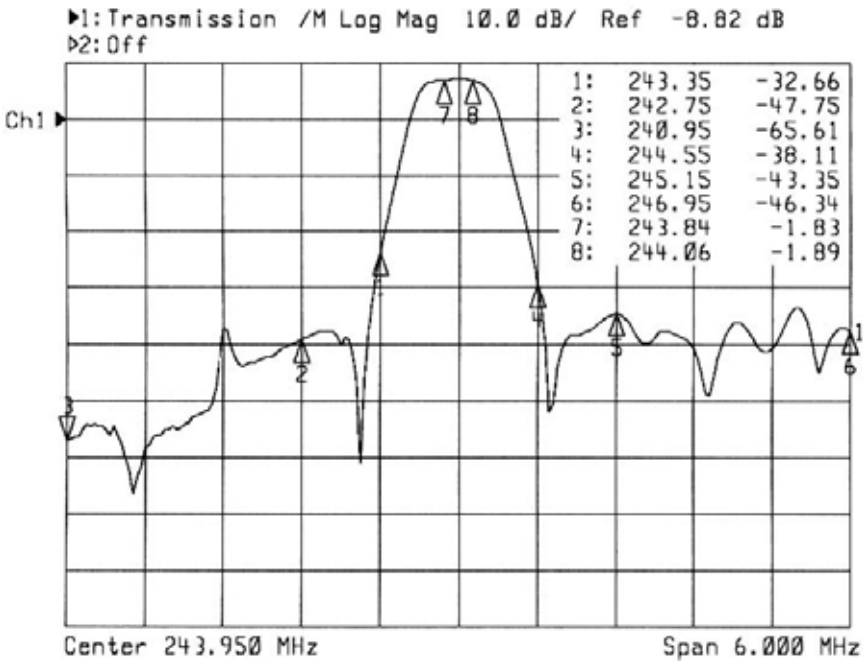
1. F5301 - Part Code
2. Date Code:
   Y : Last digit of year
   WW : Week No.

Test Circuit



C = 3.5 pF
Ls1 = Ls2 = 64 nH

Typical Frequency Response



Phone: +86 10 6301 4184 Fax: +86 10 6301 9167 Email: sales@vanlong.com Web: http://www.vanlong.com

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