

- *Designed to Cordless Telephone Selectivity in 903.65 MHz*
- *Low-Loss, Coupled-Resonator Quartz Design*
- *Simple External Impedance Matching*
- *Ultra Miniature Ceramic DCC6 SMD Package*

SF5003

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

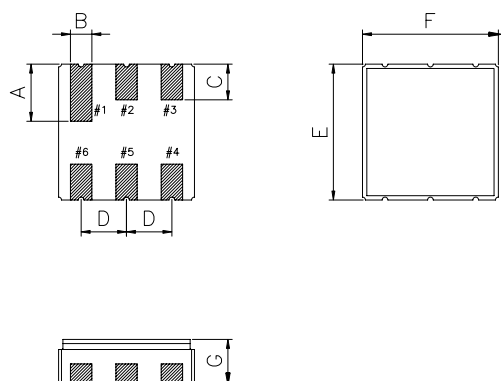
Electronic Characteristics					
Parameter	Sym	Minimum	Typical	Maximum	Unit
Nominal Frequency (at 25°C) (Center frequency between 3dB point)	f_c	NS	903.65	NS	MHz
Insertion Loss at $f_c \pm 2.0$ MHz	IL	-	4.0	5.5	dB
Passband	BW	-	± 2.0	-	MHz
Amplitude Ripple (p-p) within $f_c \pm 2.0$ MHz	$\Delta\alpha$	-	1.0	2.0	dB
Absolute Attenuation					
803.65 ... 878.65 MHz	α_{rel}	32	40	-	dB
923.65 ... 958.65 MHz		25	35	-	dB
958.65 ... 1003.65 MHz		35	45	-	dB
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 $\leq 1.2:1$. 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)



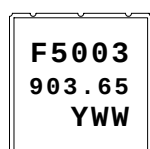
Electrical Connections

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

Package Dimensions

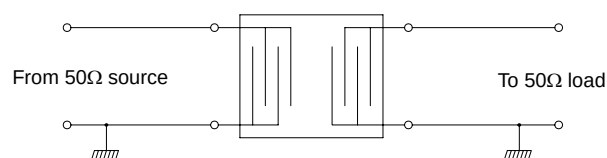
Dimensions	Nom (mm)	Dimensions	Nom (mm)
A	1.90	E	3.80
B	0.64	F	3.80
C	1.00	G	1.20
D	1.27		

Marking



1. F5003 - Part Code
2. Frequency (MHz) in 6 digits
3. Date Code:
Y : Last digit of year
WW : Week No.

Test Circuit



Typical Frequency Response

