



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



- **Designed for TD-SCDMA Applications**
- **Low Insertion Loss**
- **5.0 x 7.0 mm Surface-mount Case**
- **Complies with Directive 2002/95/EC (RoHS)**

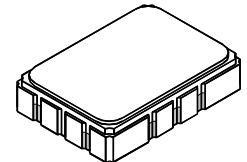


Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+15	dBm
Maximum DC Voltage Between any Two Terminals	30	VDC
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Maximum Soldering Profile	265 °C for 10 s	

SF2155B

**153.6 MHz
SAW Filter**



SMP-03-S

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency	f_C	1	153.6			MHz
Insertion Loss at f_C	IL			8	10	dB
3 dB Passband	BW_3			20		MHz
Fast Amplitude Ripple over 20 MHz Passband		1, 2			1.2	dB _{P-P}
Group Delay Variation over 20 MHz Passband	GDV			20	300	ns _{P-P}
Phase Ripple over 20 MHz Passband					10	deg _{P-P}
Rejection:						
1 to 80 MHz		1, 2, 3	50			dB
80 to 105 MHz			55			
200 to 230 MHz			50			
230 to 1000 MHz			40			
Input VSWR					3:1	
Output VSWR					3:1	
Operating Temperature Range	T_A	1	-40		+85	°C
Input/Output Impedance			50 ohms			
Case Style		6	SMP-03-S 7 x 5 mm Nominal Footprint			
Lid Symbolization, YY=year, WW=week, S=shift			RFM SF2155B YYWWS			

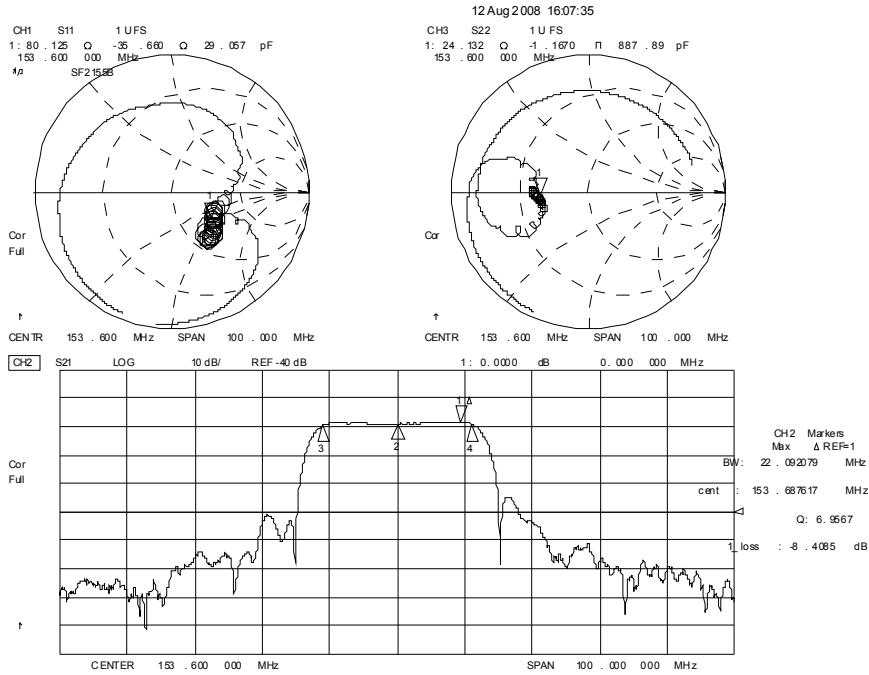


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

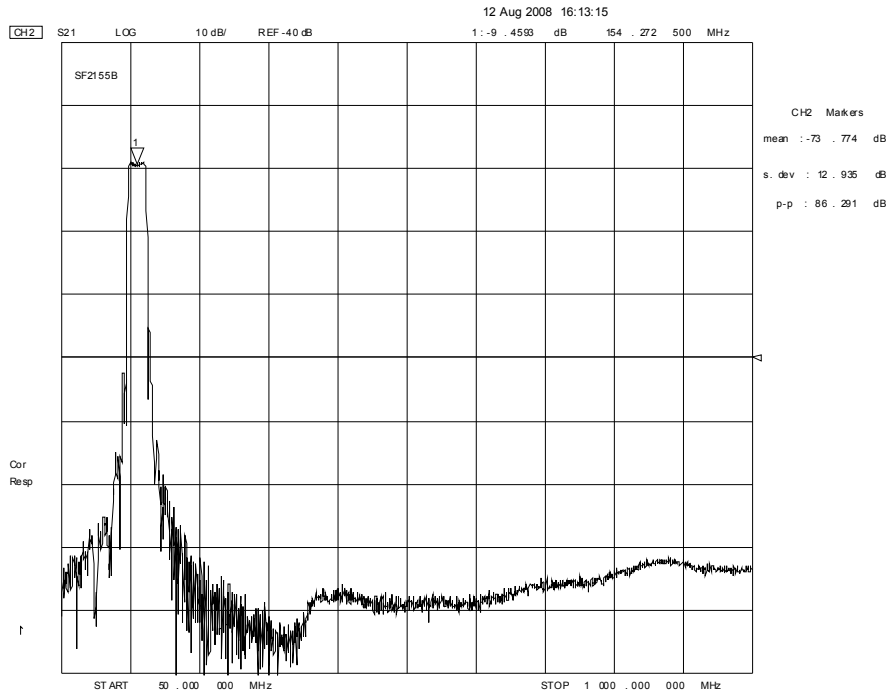
NOTES:

1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, f_c .
3. The design, manufacturing process, and specifications of this filter are subject to change.
4. Either Port 1 or Port 2 may be used for either input or output in the design. However, impedances and impedance matching may vary between Port 1 and Port 2, so that the filter must always be installed in one direction per the circuit design.
5. US and international patents may apply.

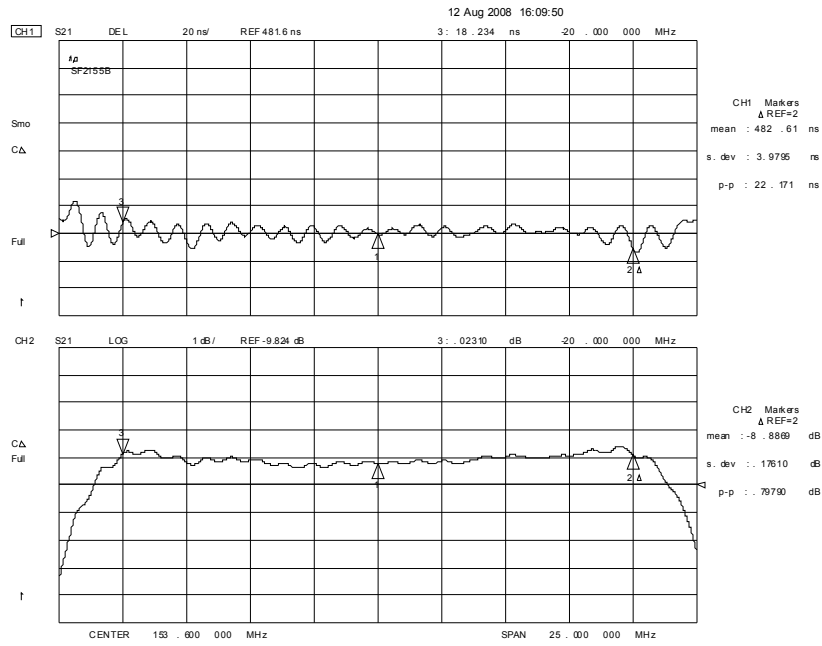
SF2155B Input/Output Impedance Plots and Amplitude Response



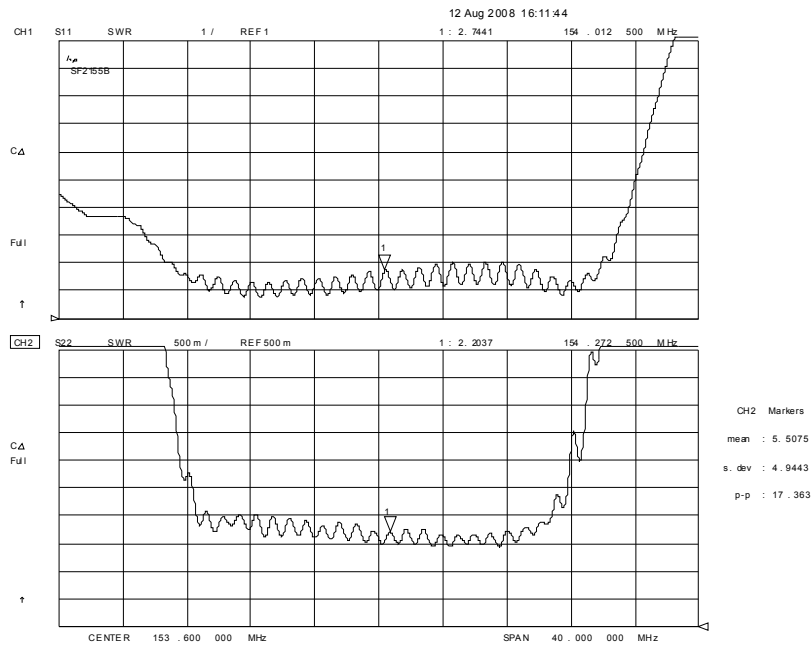
SF2155B Broadband Amplitude Response



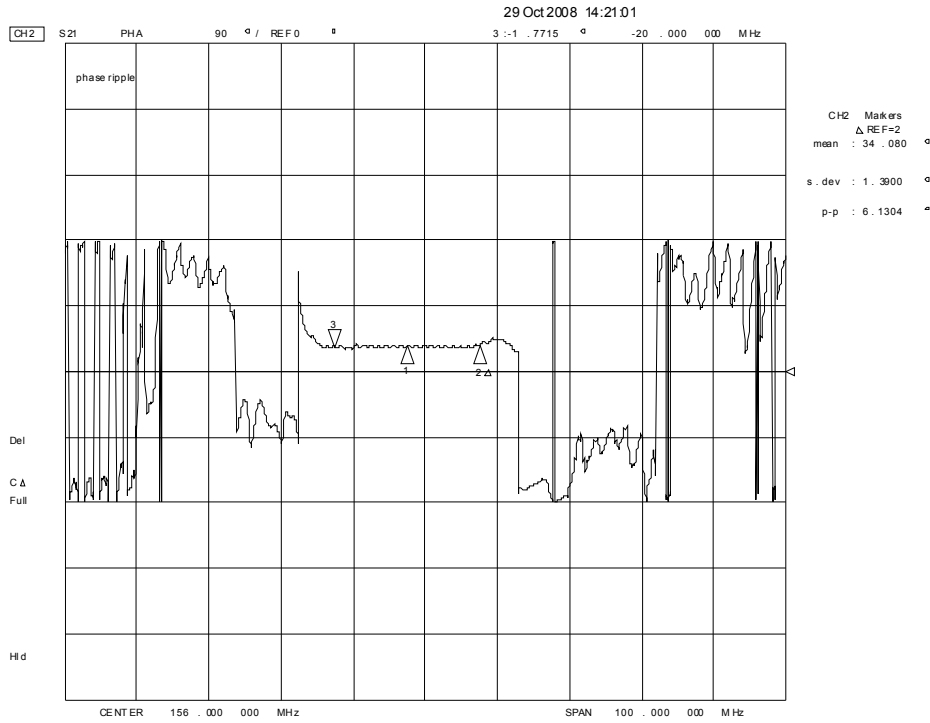
SF2155B Passband Group Delay Deviation and Amplitude Ripple



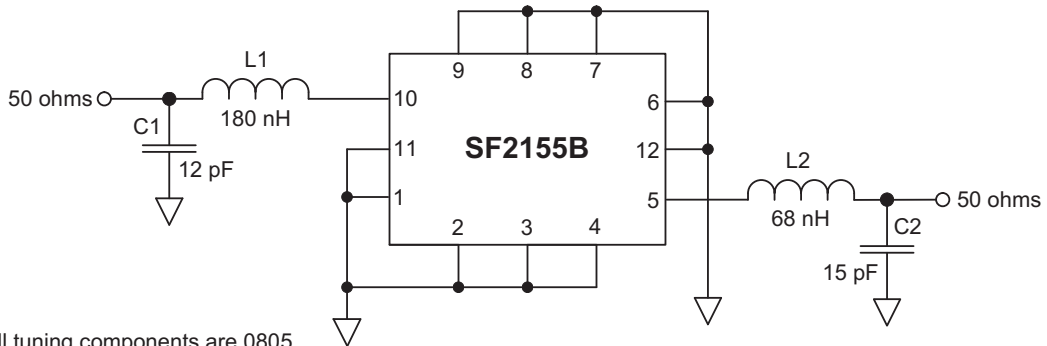
SF2155B Input/Output VSWR



SF2155B Passband Phase Ripple

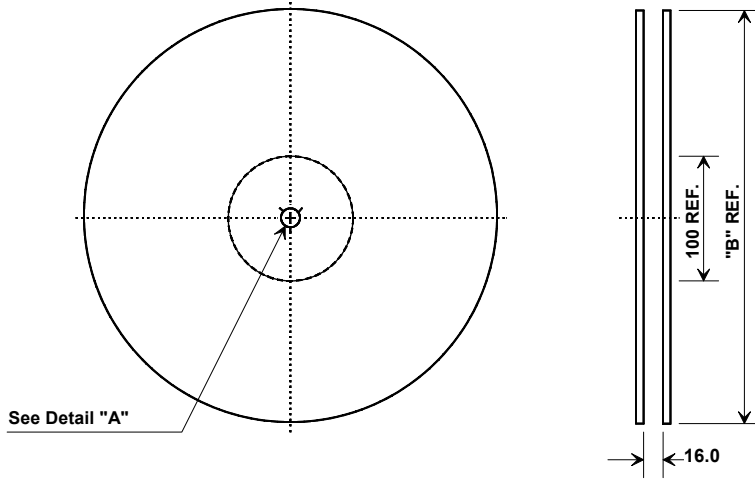


SF2155B Test Circuit

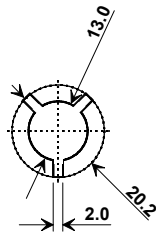


All tuning components are 0805
 Inductors are Coilcraft

Tape and Reel Specifications

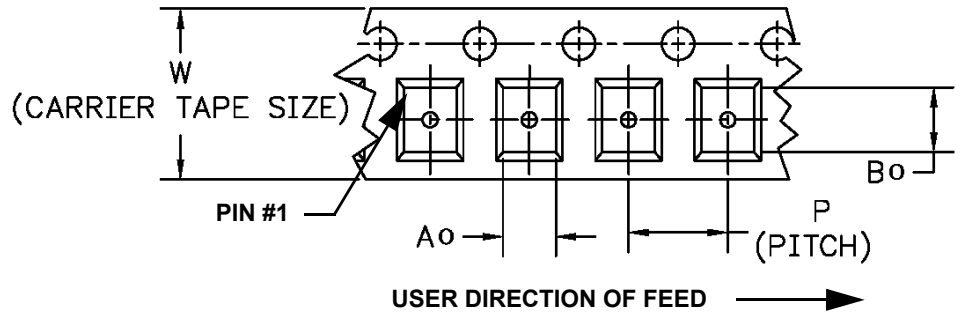
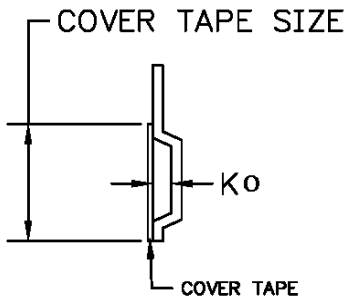


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	2000



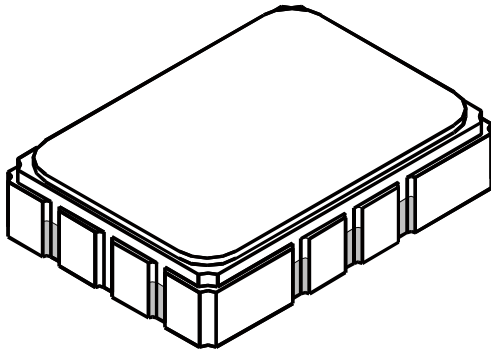
COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions		Tolerance
Ao	5.5 mm	± 0.1mm
Bo	7.5 mm	± 0.1mm
Ko	2.0 mm	± 0.1mm
Pitch	8.0 mm	± 0.1mm
W	16.0 mm	± 0.2mm



SMP-03-S Case

12-Terminal Ceramic Surface-Mount Case 5 x 7 mm Nominal Footprint



Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	6.80	7.00	7.20	0.268	0.276	0.283
B	4.80	5.00	5.20	0.189	0.197	0.205
C		1.65	2.00		0.065	0.079
D		0.80				
E	2.41	2.54	2.67	0.095	0.100	0.105
H	0.87	1.1	1.13	0.034	0.039	0.044
J		2.54				
K	2.87	3.00	3.13	0.113	0.118	0.123
P	1.14	1.27	1.40	0.045	0.050	0.055

Materials	
Solder Pad Plating	0.3 to 1.0 μm Gold over 1.27 to 8.89 μm Nickel
Lid Plating	2.0 to 3.0 μm Nickel
Body	Al_2O_3 Ceramic
Pb Free	

Electrical Connections	
Input	10
Output	5
Ground	1,2,3,4,6,7,8,9,11,12

