

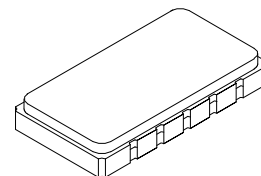
- **Low Insertion Loss**
- **13.3 X 6.5 mm Surface-Mount Case**
- **Complies with Directive 2002/95/EC (RoHS)**

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+13	dBm
Max. DC voltage between any 2 terminals	30	VDC
Storage Temperature Range	-40 to +85	°C
Suitable for lead-free soldering - Max Soldering Temperature	260°C for 30 s	

SF2085A

**96.00 MHz
SAW Filter**



SMP-53-S

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency	f _C	1		96.000		MHz
Insertion Loss		1		17	19	dB
Passband Ripple	CF ±15 MHz	1			2	dB p-p
Passband	1dB	1	35			MHz
Passband	3dB	1		36		MHz
Group Delay	Fc±15 MHz within adjacent 5 MHz windows	1			50	nsec
Amplitude Ripple	Fc±15 MHz within adjacent 5 MHz windows	1			1.5	dB
VSWR at Fc		1			1.8	
Group Delay	Absolute Group Delay Variation; CF ±15 MHz	1		180		nsec
Rejection	40 dB	1, 2			50	MHz
Temperature	Operating		-40		85	°C
	Storage		-40		85	
Matching to 50Ω Balanced or Single Ended Impedance		External L-C				
Case Style		SMP-53-S 13.3 x 6.5 mm Nominal Footprint				
Lid Symbolization (YY=year, WW=week, S=shift)		RFM SF2085A YYWWS				



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

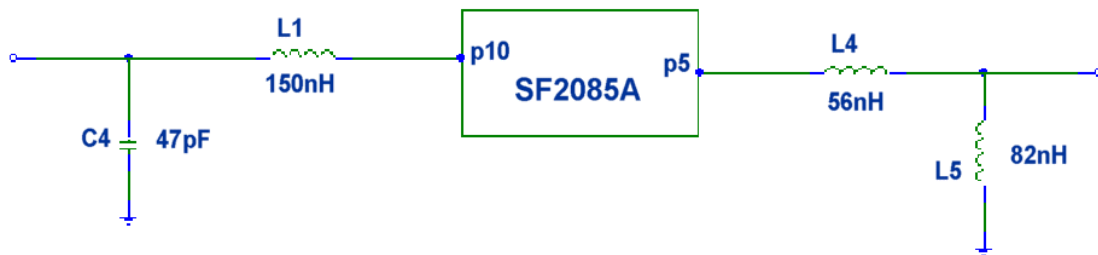
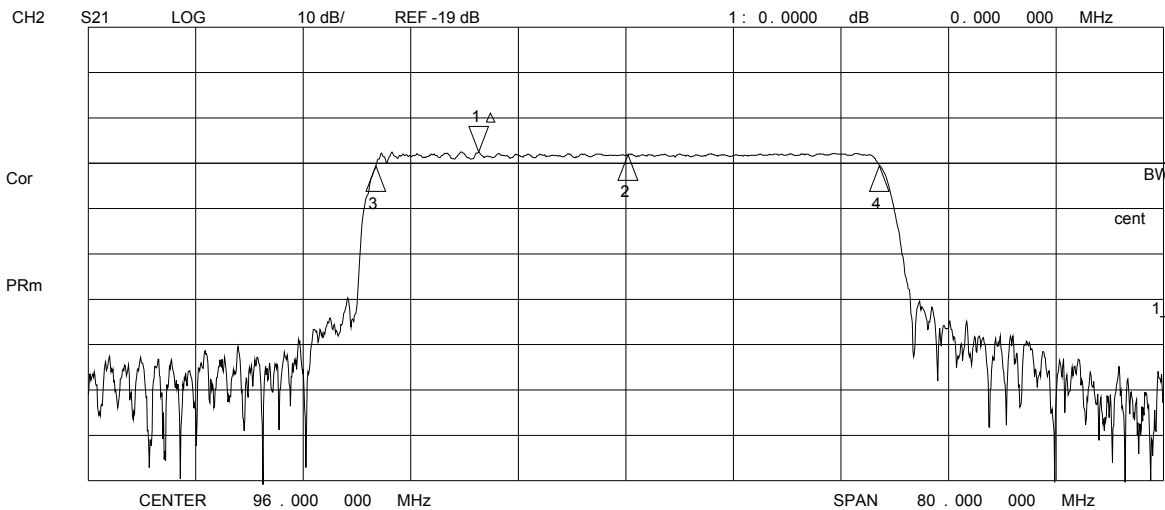
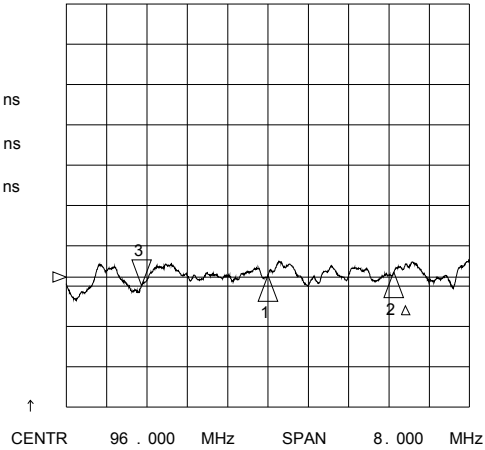
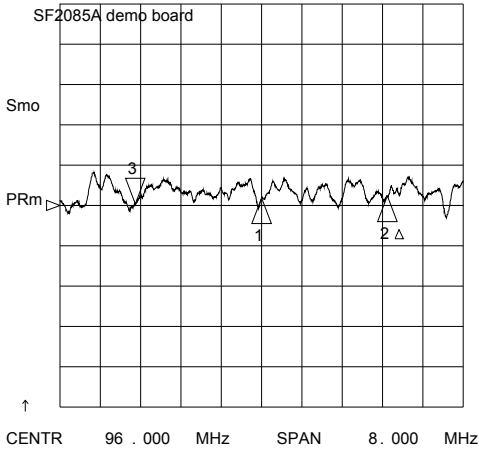
NOTES:

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. Rejection is measured as attenuation below the minimum IL point in the passband. Rejection in final user application is dependent on PCB layout and external impedance matching design. See Application Note No. 42 for details.
3. The design, manufacturing process, and specifications of this filter are subject to change.
4. Tape and Reel Standard ANSI / EIA 481.
5. 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.
6. US and international patents may apply.
7. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

9 Aug 2005 13:06:30

CH1 DEL 100 ns/ REF 800 ns
S21 3:-20 .075 ns -5 .000 000 MHz

CH3 LOG 1 dB/ REF -17.8 dB
S21 3:-.34120 dB -5 .000 000 MHz



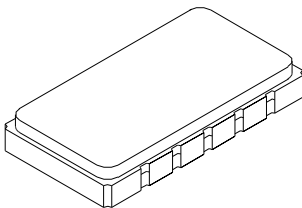
SMP-53-S Case

10-Terminal Ceramic Surface-Mount Case

13.3 x 6.5 mm Nominal Footprint

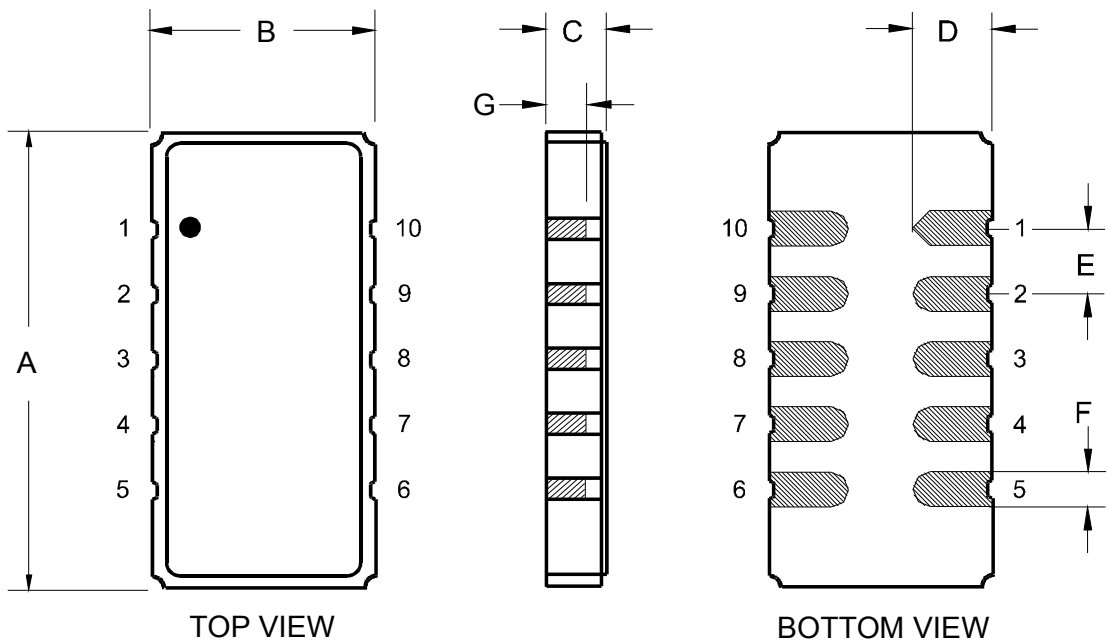
Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A		13.3			.524	
B		6.5			.256	
C			2.00			.078
D		2.3			.091	
E		1.91			.075	
F		1.02			.040	
G		1.0			0.039	

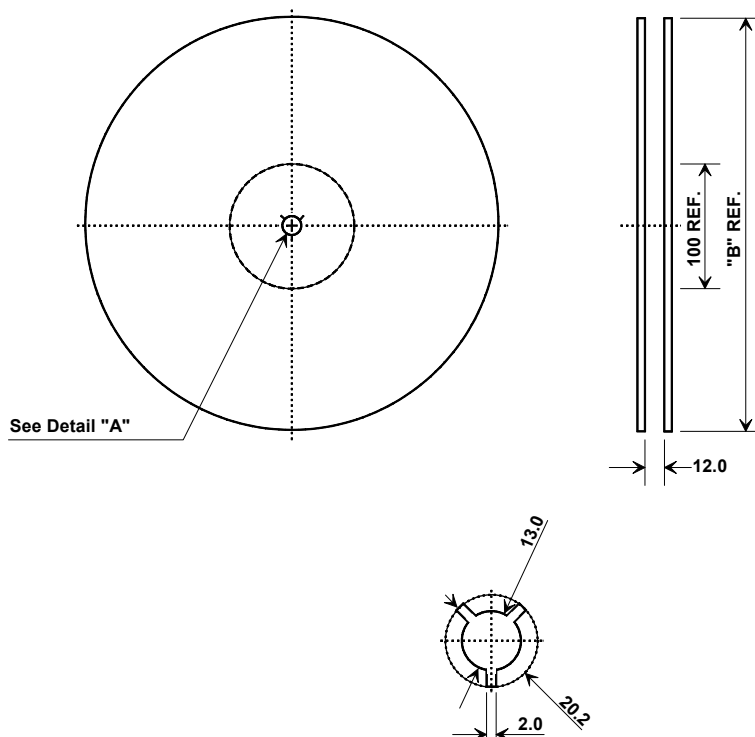


Electrical Connections

Connection	Terminals
Input	10
Input Return	1
Output	5
Output Return	6
Ground	All others



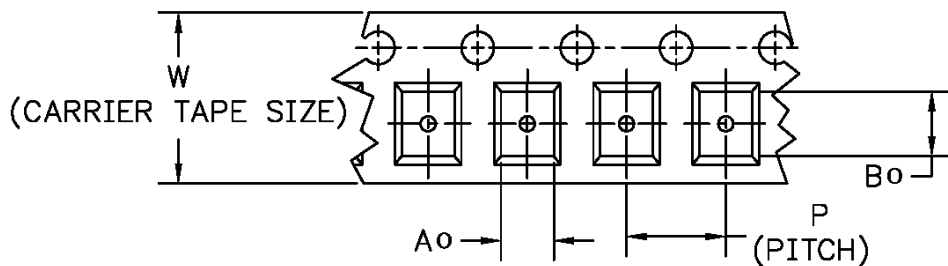
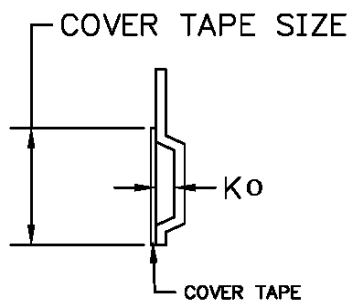
Tape and Reel Specifications



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

COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Cover Tape	21.3 mm
Ao	.274 ± .004 (7.0)
Bo	.542 ± .004 (13.76)
Ko	.088 ± .004 (2.2)
Pitch	12 mm
W	24 mm
Tape Length	86 M
Pockets/M	83/M



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