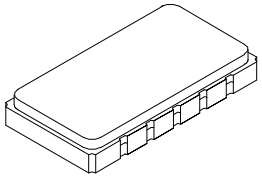
SF2085A

96.00 MHz
SAW Filter

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



SMP-53-S

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	

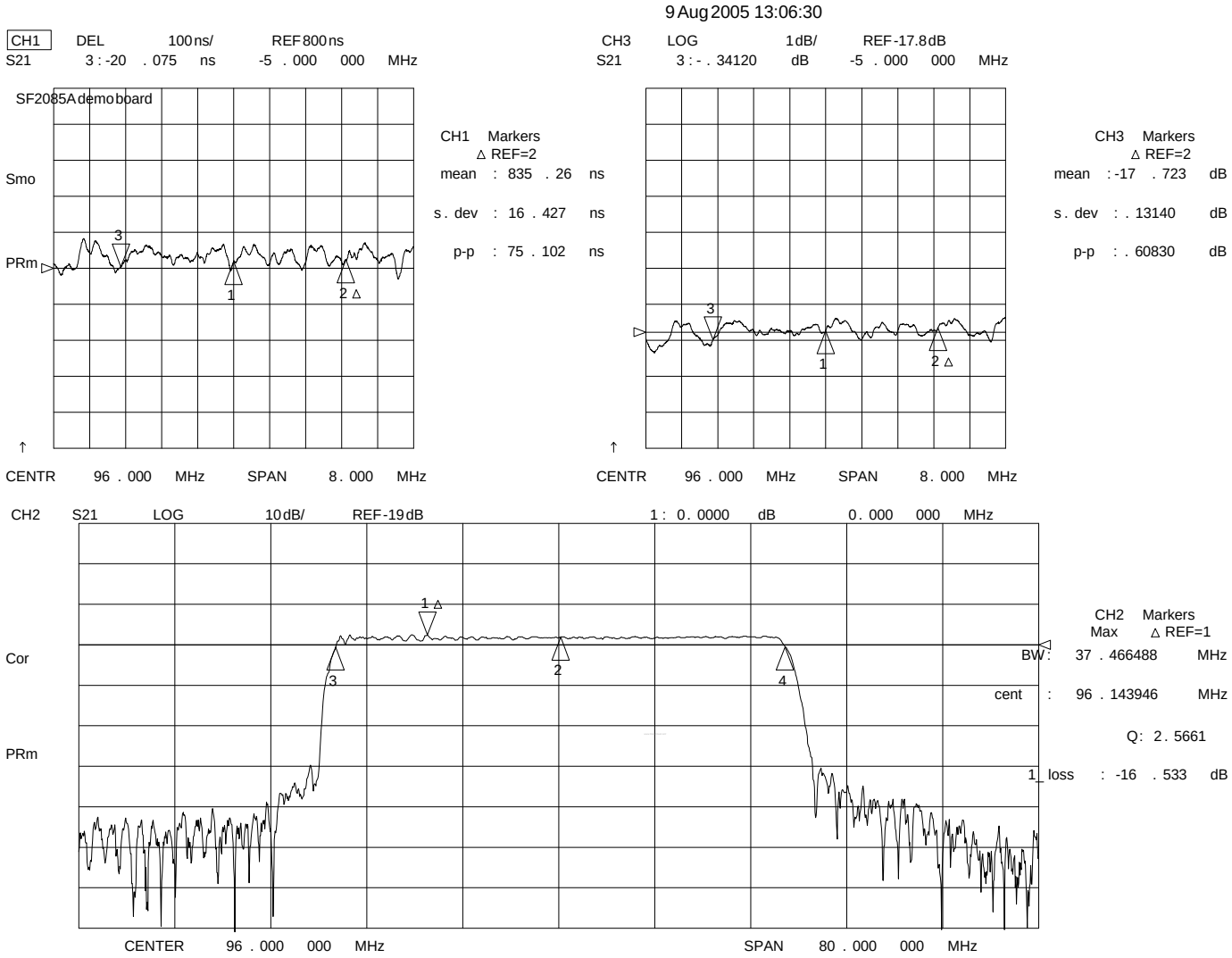
Electrical Characteristics

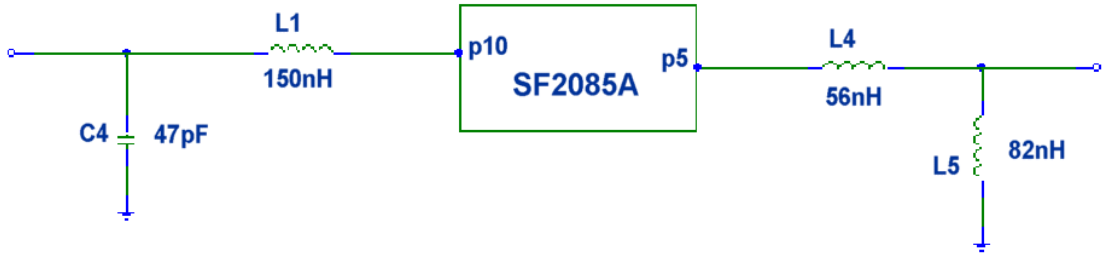
Characteristic			Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency			f_C	1		96.000		MHz
Insertion Loss				1		17	19	dB
Passband Ripple		CF ±15 MHz		1			2	dB p-p
Passband		1dB		1	35			MHz
Passband		3dB		1		36		MHz
Group Delay	Fc±15 MHz	within adjacent 5 MHz windows		1			50	nsec
Amplitude Ripple	Fc±15 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				

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. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.
8. ©Copyright 1999, RF Monolithics Inc.
9. Electrostatic Sensitive Device. Observe precautions for handling.

RF Monolithics, Inc. Phone: (972) 233-2903 Fax: (972) 387-8148 E-mail: info@rfm.com
RFM Europe Phone: 44 1963 251383 Fax: 44 1963 251510 http://www.rfm.com

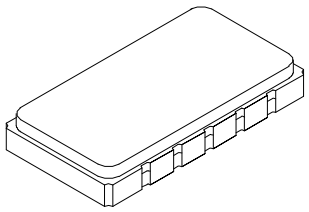
96.00 MHz SAW Filter





SMP-53-S Case

10-Terminal Ceramic Surface-Mount Case
13.3 x 6.5 mm Nominal Footprint

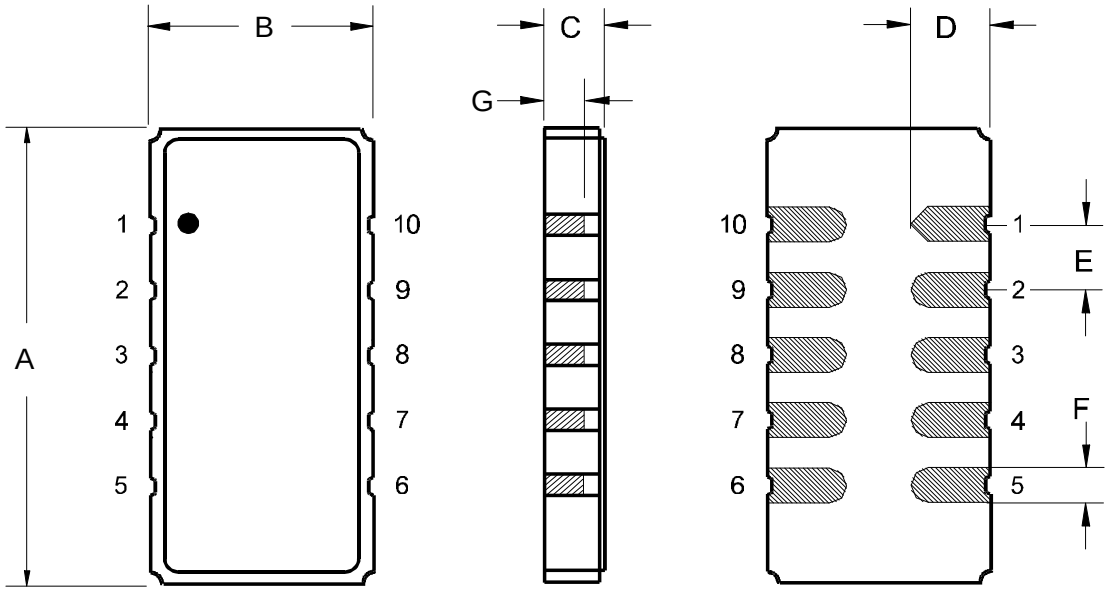


Case Dimensions

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	

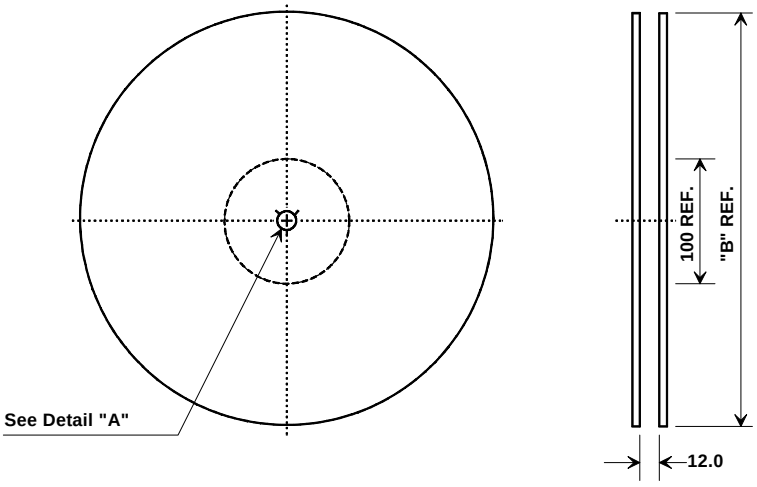
Electrical Connections

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



TOP VIEW BOTTOM VIEW

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	
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