SF1084B 299 MHz SAW Filter



- Designed for GSM BTS Transmitter Applications
- Low Insertion Loss and Small Size
- 8.5 x 5.8 mm Surface-Mount Case
- Unbalanced Input and Output



$\int_{\mathbb{R}^n}$

Characteristic			Min	Тур	Max	Units	Notes
Nominal Center Frequency		fc	299.000			MHz	1
Passband	Insertion Loss at fc	IL		6	8.0	dB	
	3 dB Passband	BW ₃	±275			kHz	1, 2
	Amplitude Ripple over fc ±75 kHz				0.3	dB _{P-P}	
	Group Delay Variation over fc ±75 kHz	GDV			100	ns _{P-P}	
Rejection	100 kHz to fc-6.0 MHz and fc+6.0 to 540 MHz		20	40		dB	1, 2, 3
	Ultimate			>40			
Operating Temperature Range		T_A	-40		+85	°C	1

Impedance Matching to 50 Ω unbalanced	External L-C			
Case Style	SM8558-8 8.5 x 5.8 mm Nominal Footprint			
Lid Symbolization (YY=year, WW=week, XXX=lot code)	RFM SF1084B YYWWXXX			

Absolute Maximum Ratings

Rating	Value	Units	
Maximum Incident Power in Passband	+10	dBm	
Max. DC voltage between any 2 terminals	30	VDC	
Storage Temperature Range	-40 to +85	°C	
Max Soldering Profile	235°C for 90 s		

Electrical Connections

Connection	Terminals		
Port 1 Hot	7		
Port 1 Gnd Return	1		
Port 2 Hot	3		
Port 2 Gnd Return	5		
Case Ground	All Others		

Notes:

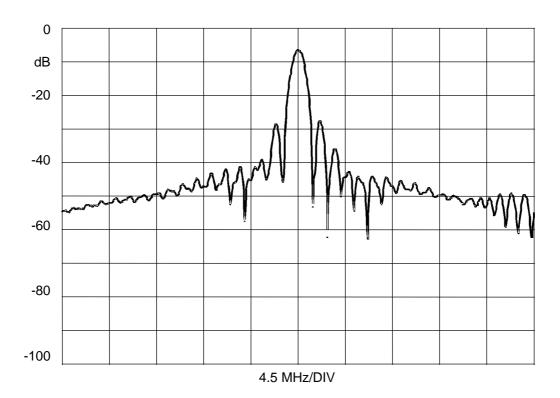
- Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
- 2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc.
- 3. 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.
- 4. "LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."
- 5. The design, manufacturing process, and specifications of this filter are subject to change.
- 6. 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.
- 7. US and international patents may apply.
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- 10. Electrostatic Sensitive Device. Observe precautions for handling.



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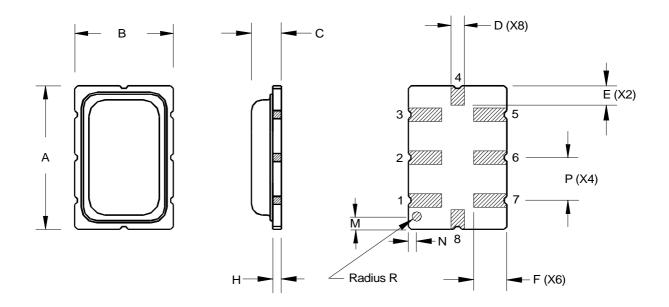




8-Terminal Ceramic Surface-Mount Case 8.5 x 5.8 mm Nominal Footprint



Dimension	mm			Inches			
Dilliension	Min	Nom	Max	Min	Nom	Max	
Α	8.26	8.51	8.76	0.325	0.335	0.345	
В	5.59	5.84	6.10	0.220	0.230	0.240	
С		1.70	2.00		0.067	0.079	
D		0.79			0.031		
E		1.14			0.045		
F		1.98			0.078		
Н		0.51			0.020		
M		0.76			0.030		
N		0.51			0.020		
Р		2.54			0.100		
R		0.51			0.020		



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