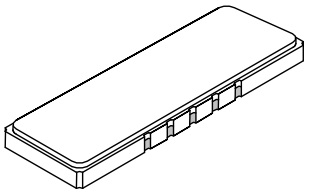
SF1088A

170.6 MHz SAW Filter

- ***Designed for GSM BTS Receiver IF Applications***
- ***Low Insertion Loss***
- ***Excellent Size-to-Performance Ratio***
- ***Hermetic SMP-75 Surface-Mount Case***
- ***Unbalanced Input and Output***
- ***Complies with Directive 2002/95/EC (RoHS)***
- ***Tape and Reel Standard per ANSI/EIA-481***
- ***Moisture Sensitivity Level: 1***

RoHS Compliant



SMP-75

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
Suitable for lead-free soldering - Max. Soldering Profile	260°C for 30 s	

Electrical Specifications

Characteristic		Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency		f_C			170.600		MHz
Passband	Insertion Loss at fc	IL				8.0	dB
	1 dB Passband			±90			kHz
	Amplitude Ripple over fc±90 kHz					1.0	dB_{P-P}
	Group Delay Variation over fc ±190 kHz	GDV			<500	1000	ns_{P-P}
Rejection	fc-0.6 to fc-0.4 and fc+0.4 to fc+0.6 MHz			13	15		dB
	fc-0.8 to fc-0.6 and fc+0.6 to fc+0.8 MHz			27	35		
	fc-1.6 to fc-0.8 and fc+0.8 to fc+1.6 MHz			40	45		
	fc-3.0 to fc-1.6 and fc+1.6 to fc+3.0 MHz			43	55		
	fc-5.8 to fc-3.0 and fc+3.0 to fc+5.8 MHz			47	55		
	fc-35 to fc-5.8 and fc+5.8 to fc+35 MHz			50	55		
	fc-75 to fc-35 and fc+35 to 75 MHz			45	55		
	DC to fc-75 and fc+75 to fc+1000 MHz			40			
Operating Temperature Range		T_A		-10		+85	°C

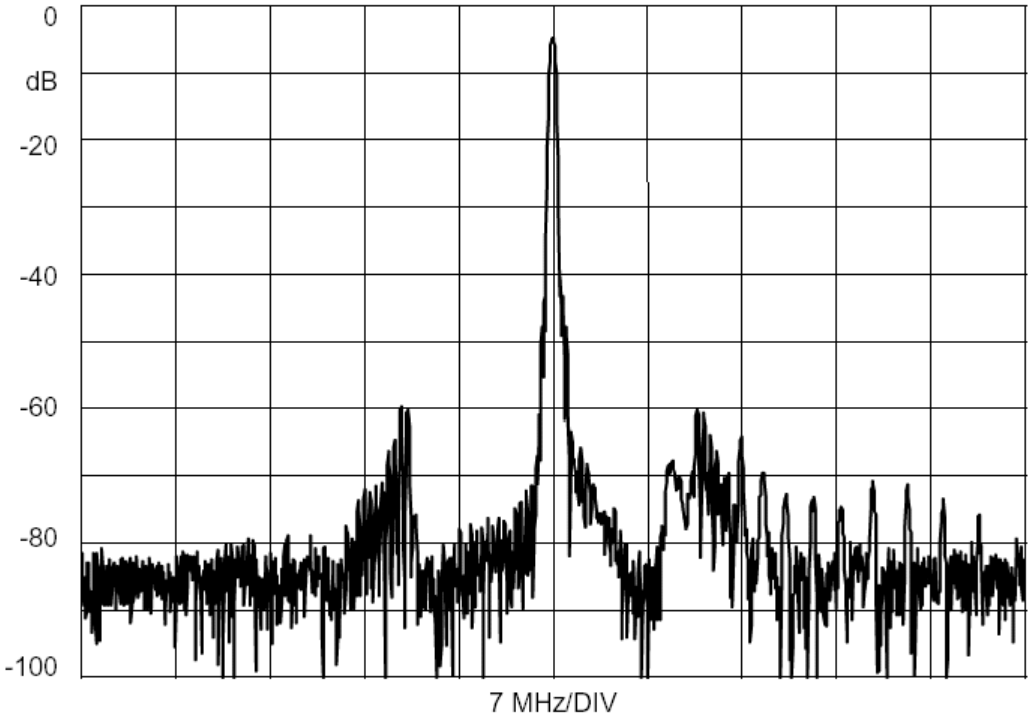
Impedance Matching to 50 Ω unbalanced	External L-C
Case Style	SMP-75 19 x 6.5 mm Nominal Footprint
Lid Symbolization (YY = year, WW = week, S = Shift)	RFM, SF1088A, YYWWS

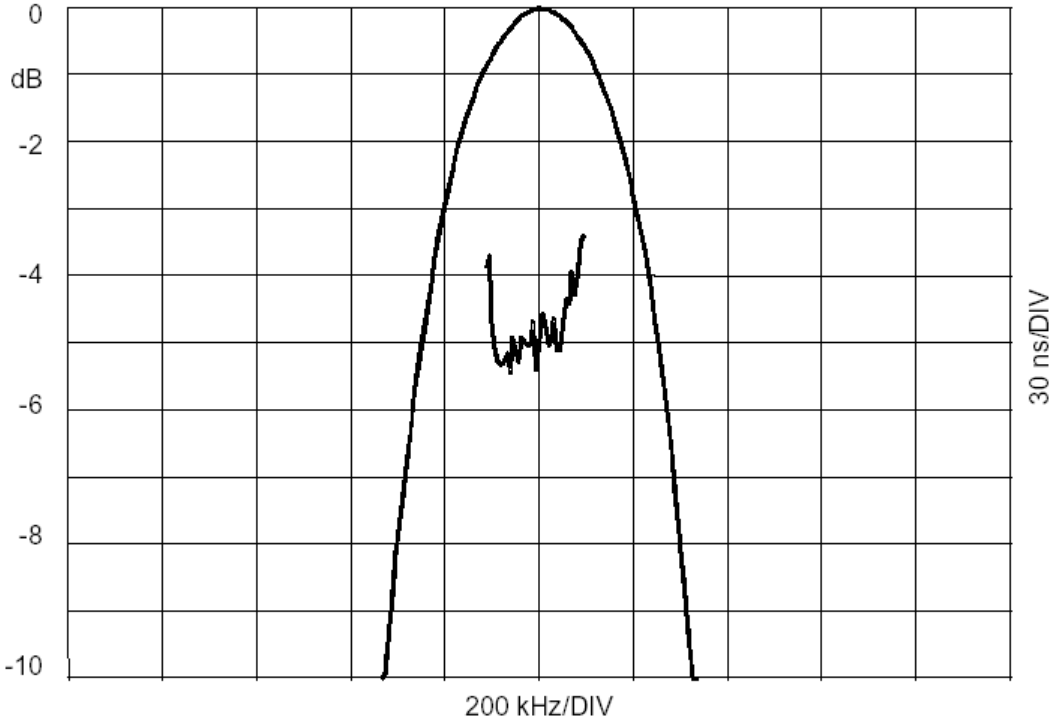
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

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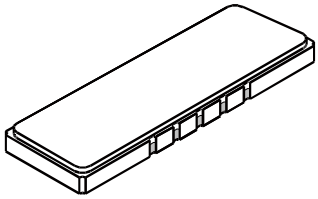




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SMP-75 Case

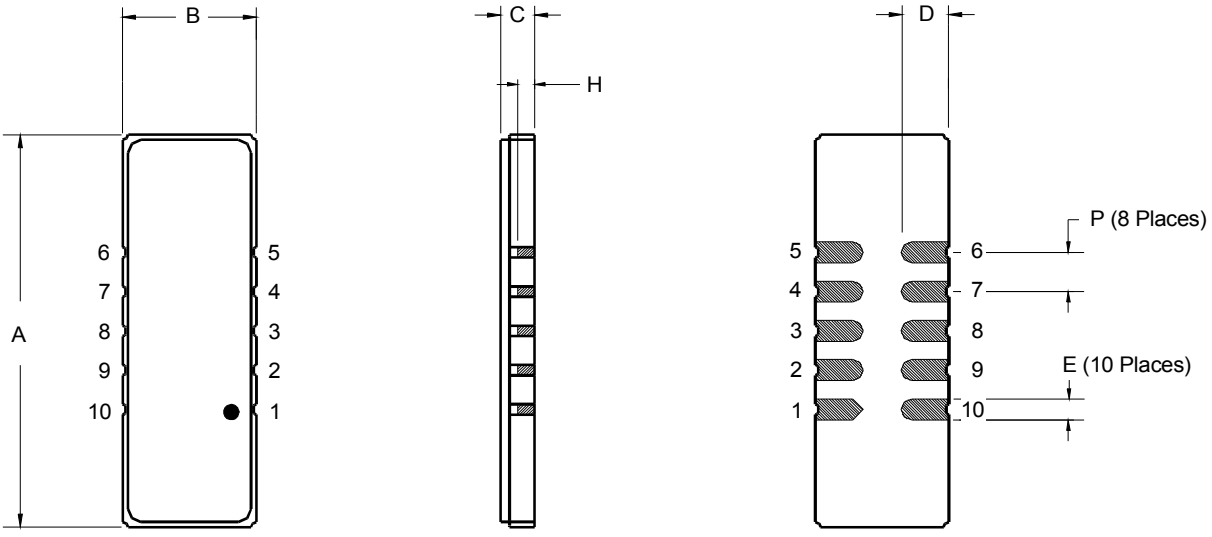
10-Terminal Ceramic Surface-Mount Case
19 x 6.5 mm Nominal Footprint



Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	18.80	19.00	19.30	0.740	0.748	0.760
B	6.30	6.50	6.80	0.248	0.256	0.268
C		1.75	2.00		0.069	0.079
D		2.29			0.090	
E		1.02			0.040	
H		1.0			0.039	
P		1.905			0.075	

Materials	
Solder Pad Termination	Au plating 30 - 60 µinches (76.2-152 µm) over 80-200 µinches (203-508 µm) Ni.
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 µinches Thick
Body	Al_2O_3 Ceramic
Pb Free	

Electrical Connections		
Connection		Terminals
Port 1	Input or Return	10
	Return or Input	1
Port 2	Output or Return	5
	Return or Output	6
Ground		All others
Single Ended Operation		**Return is ground**
Differential Operation		**Return is hot**

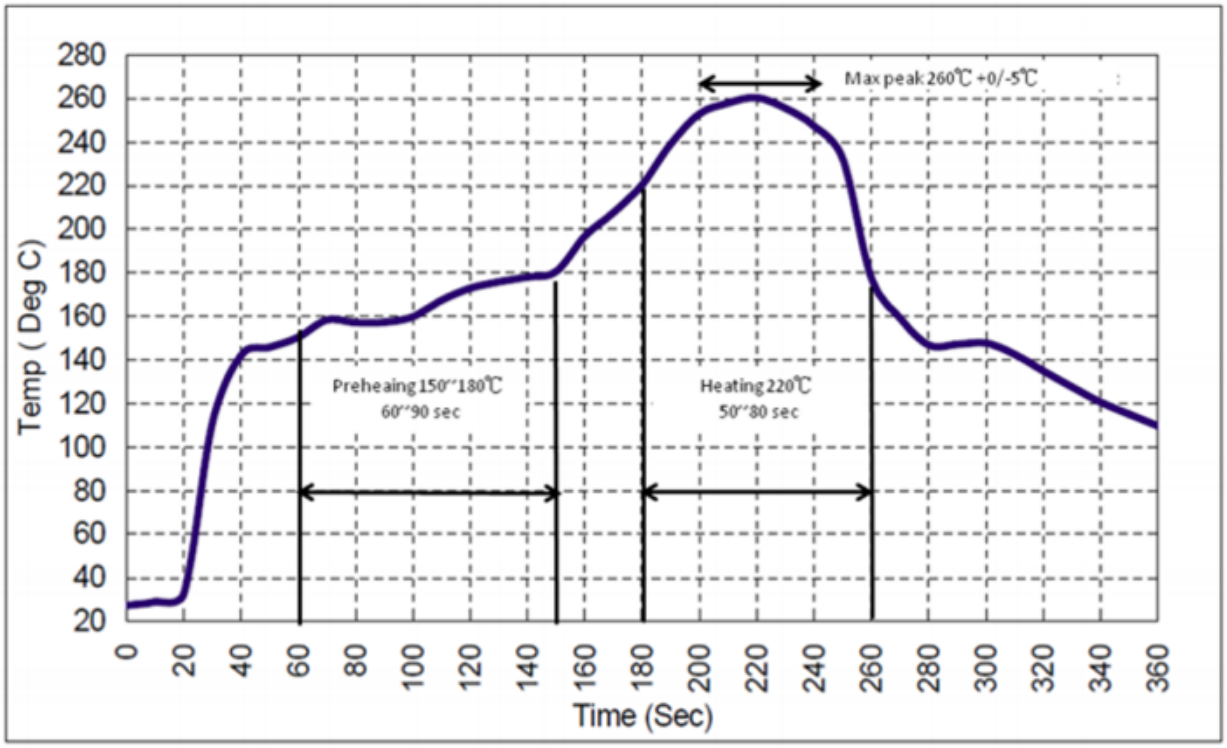


TOP VIEW **BOTTOM VIEW**

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Recommended Reflow Profile

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C+0/-5°C peak (10 seconds).
4. Time: 5 times maximum.



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