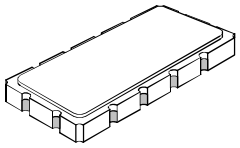
PX1002

86.85 MHz SAW Filter

- ***Designed for TDMA IS-54 Receiver IF Applications***
- ***Low Insertion Loss***
- ***Excellent Selectivity***
- ***Hermetic 13.3 X 6.5 mm Surface-mount Case***
- ***Unbalanced Input and Output***
- ***Complies with Directive 2002/95/EC (RoHS)***

RoHS Compliant



SM13365-12

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Maximum DC Voltage Between any 2 terminals	30	VDC
Storage Temperature Range	-40 to +85	°C
Suitable for Lead-free Soldering - Maximum Soldering Profile	260 °C for 30 s	

Electrical Characteristics

Characteristic		Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency		f_C			86.850		MHz
Passband	Insertion Loss at fc	IL			3	4.0	dB
	3 dB Passband	BW_3		±12	±25		kHz
	Amplitude Ripple over fc ±15 kHz					1.0	dB_{P-P}
	Group Delay Variation over fc ±10 kHz	GDV				6.0	μs_{P-P}
Third-Order Intermod. for -20 dBm tones at fc ±60 & 120 kHz						-95	dBm
Rejection	fc ±60 kHz			11	16		dB
	fc -880 kHz to fc -940 kHz			65			
	Ultimate				65		
Operating Temperature Range		T_A		-20		+70	°C

Impedance Matching to 50 Ω unbalanced	External L-C
Case Style	SM13365-12 13.3 X 6.5 mm Nominal Footprint
Lid Symbolization (YY=year, WW=week, s=shift)	RFM PX1002 YYWWS
Standard 7" Reel Quantity	500 units
Standard 13" Reel Quantity	1000 units

Electrical Connections

Connection	Terminals
Port 1Hot	2
Port 1 Gnd Return	3
Port 2 Hot	8
Port 2 Gnd Return	9
Case Ground	All Others

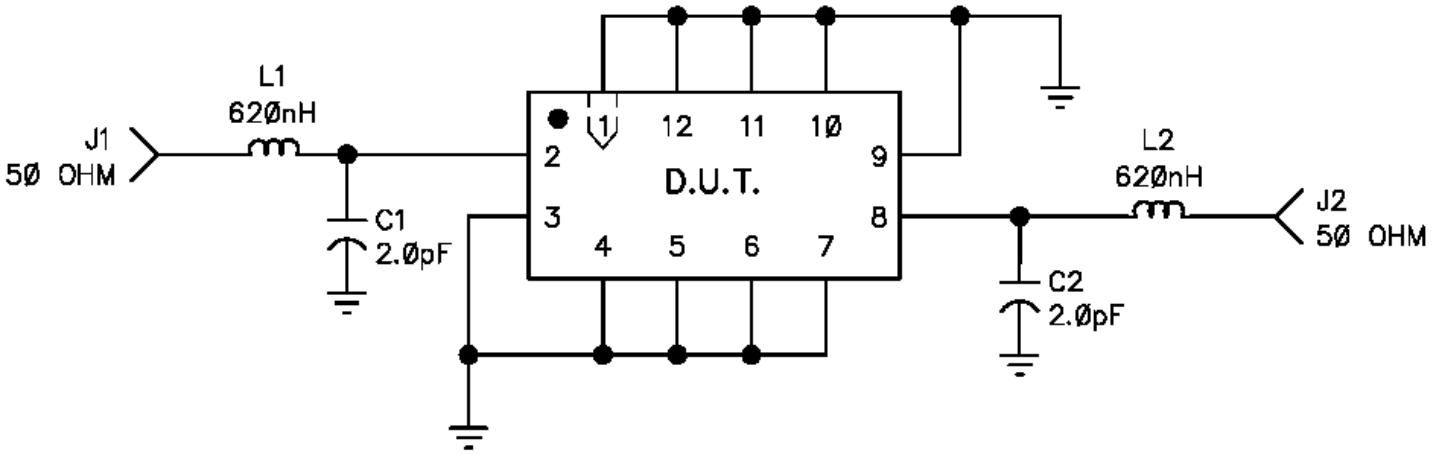
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

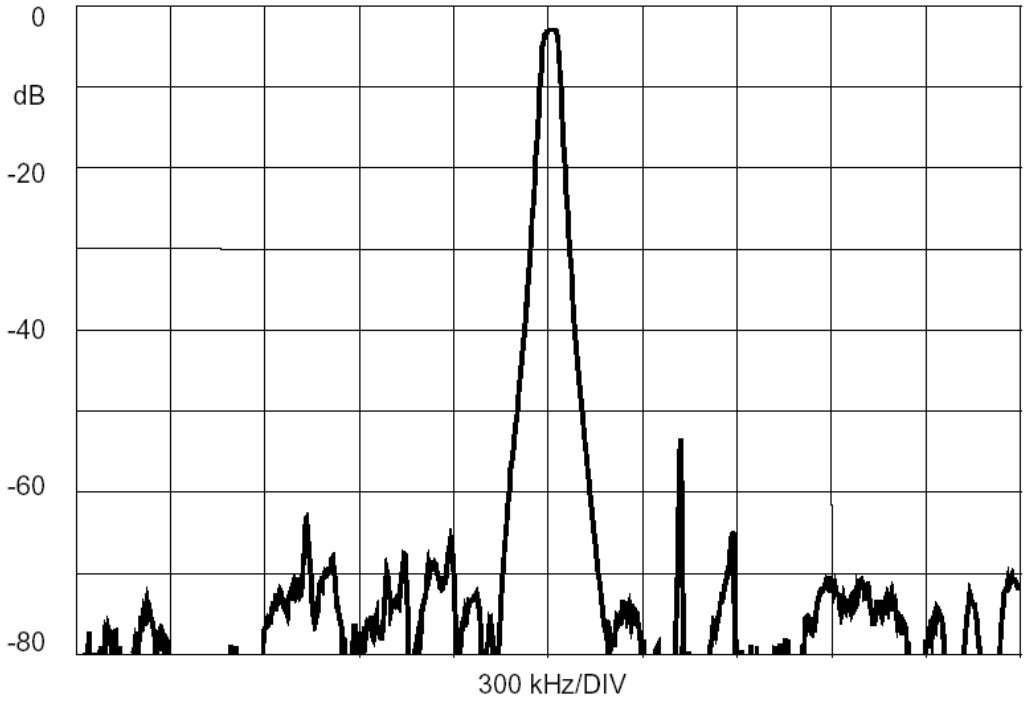
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

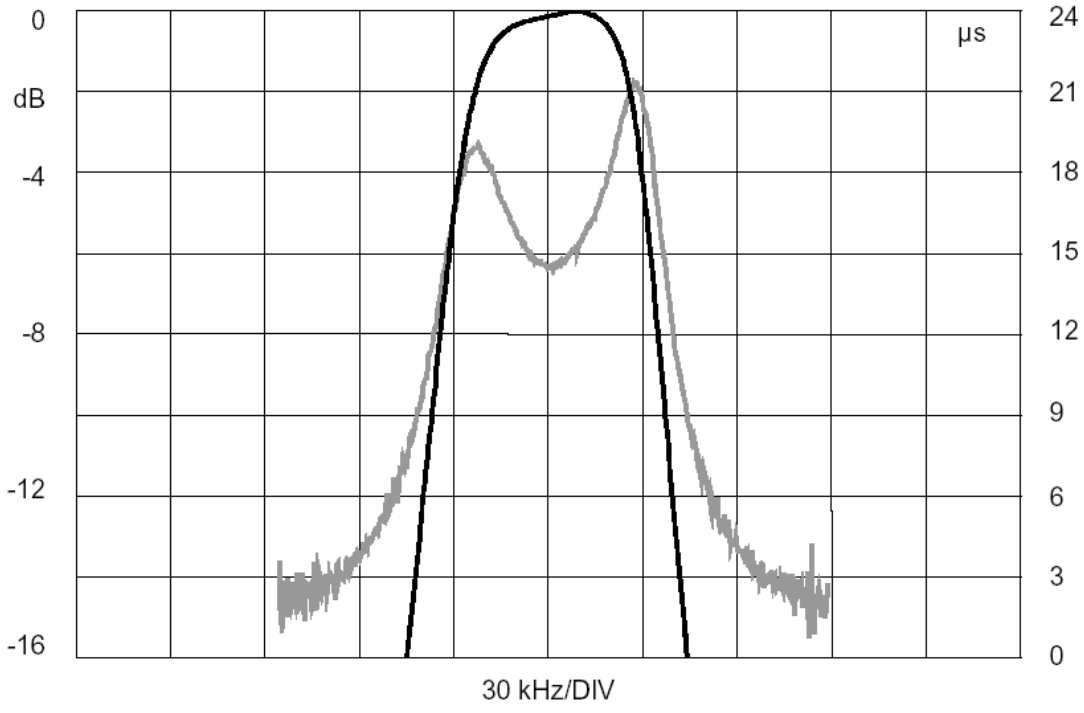
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SCHEMATIC, PX1ØØ2 (DEMO)



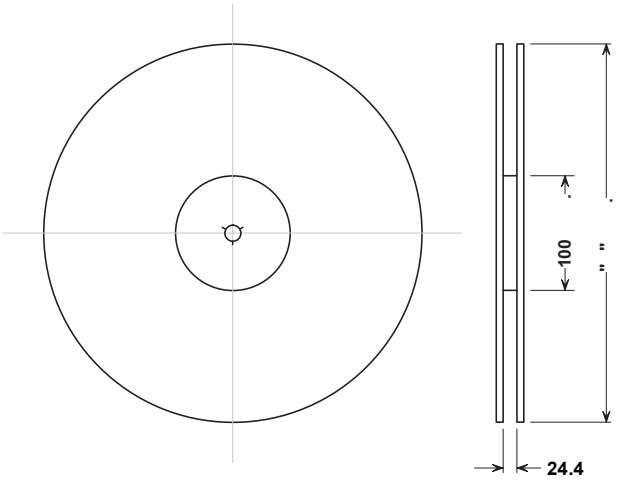
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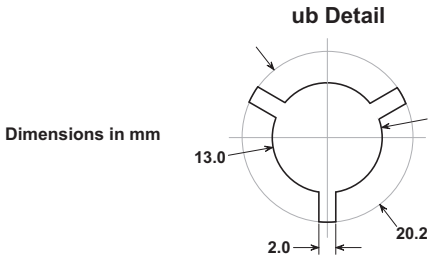
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Tape and Reel Specifications



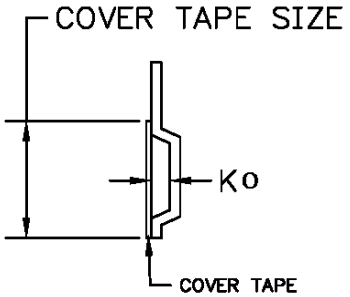
Tape and Reel Standard per ANSI/EIA-481

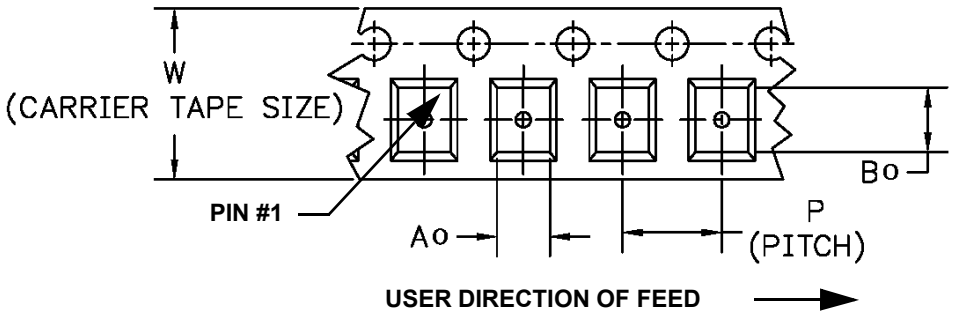
"B"		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	7.0 mm
Bo	13.8 mm
Ko	2.0 mm
Pitch	12.0 mm
W	24.0 mm

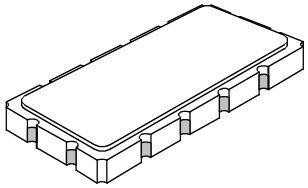




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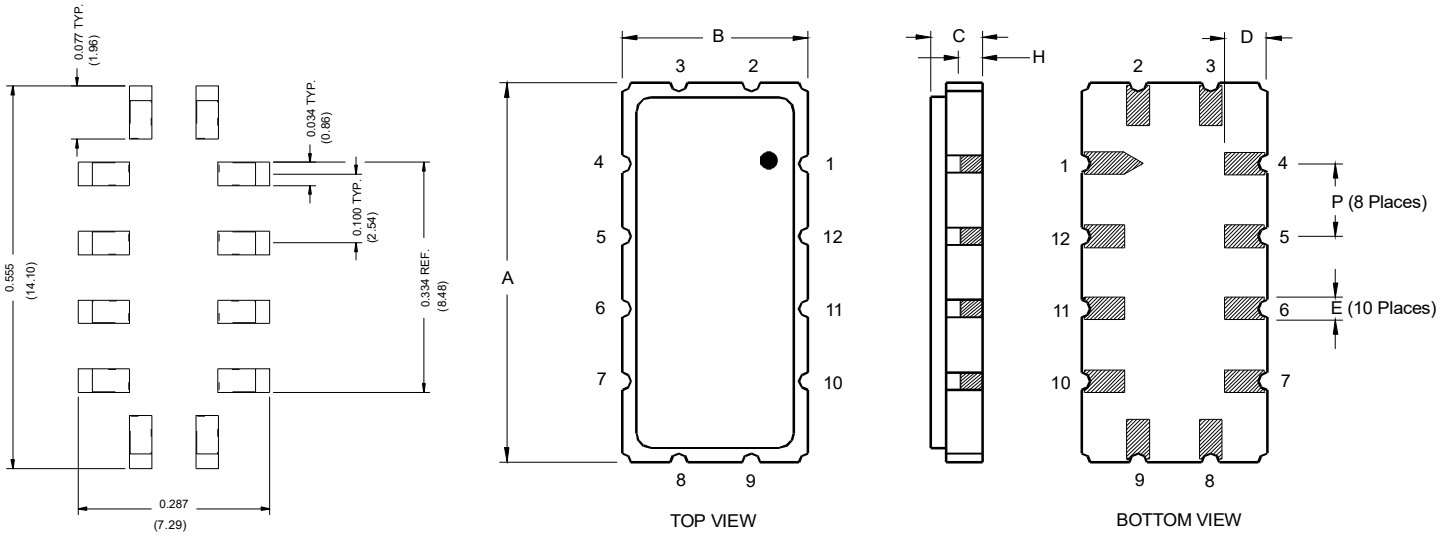
SM13365-12 Case

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



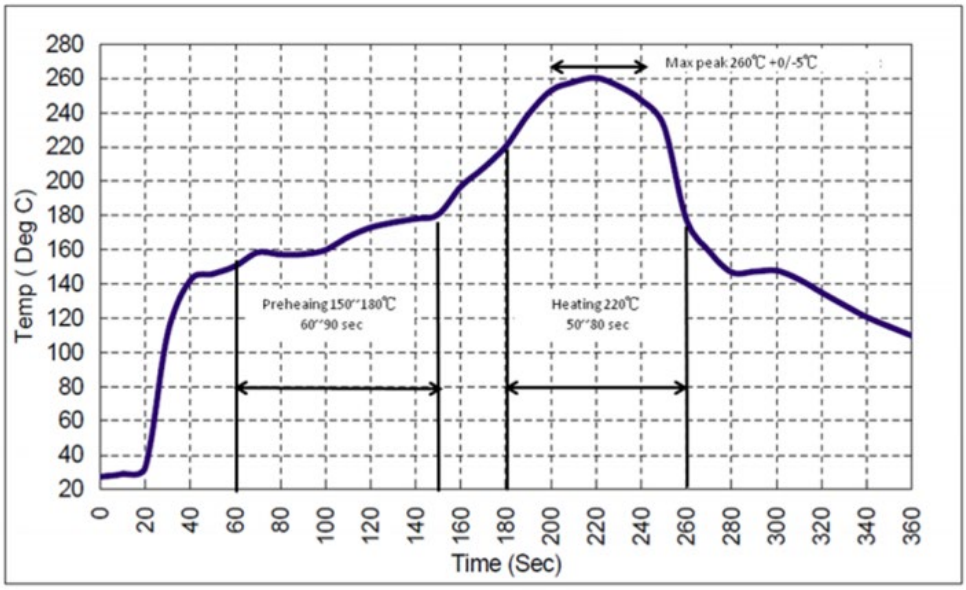
Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	13.08	13.31	13.60	0.515	0.524	0.535
B	6.27	6.50	6.80	0.247	0.256	0.268
C		1.91	2.00		0.075	0.079
D		1.50			0.059	
E		0.79			0.031	
H		1.0			0.039	
P		2.54			0.100	

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



Recommended Reflow Profile

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



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