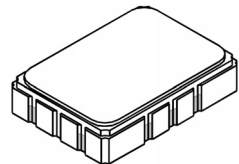




AEC-Q200

This component was always
RoHS compliant from the first
date of manufacture.

SF1140B-2**75.00 MHz
SAW Filter****SMP-03**

- *Designed for SDARS IF Receiver*
- *Low Insertion Loss*
- *5.0 X 7.0 mm Surface-Mount Case*
- *Differential Input and Output*
- *Complies with Directive 2002/95/EC (RoHS)*

**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 +105	°C
Max Soldering Profile	265°C for 10 s	

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency	f_c			75.000		MHz
Passband	Insertion Loss at f_c	IL		11.0	13.0	dB
	1dB Passband	BW_1	± 2.1	± 2.7		MHz
	Fast Amplitude Ripple over $f_c \pm 2.1$ MHz				1.0	dB _{P-P}
	Group Delay Variation over $f_c \pm 2.1$ MHz	GDV		40	200	ns _{P-P}
Rejection	$f_c - 15$ to $f_c - 7.15$ and $f_c + 15$ to $f_c + 65$ MHz		40	43		dB
	$f_c + 7.15$ to $f_c + 15$ MHz		36			
Operating Temperature Range	T_A		-40		+105	°C
Differential Input and Output Impedance			250 ohms			
Case Style			SMP-03 7 x 5 mm Nominal Footprint			
Lid Symbolization (YY=year, WW=week, S=shift)			RFM, SF1140B-2, YYWWWS			

Electrical Connections

Connection	Terminals
Port 1 Hot	10
Port 1 Ground Return	1
Port 2 Hot	5
Port 2 Ground Return	6
Case Ground	All Others

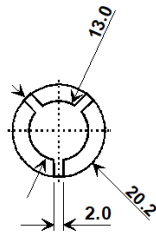
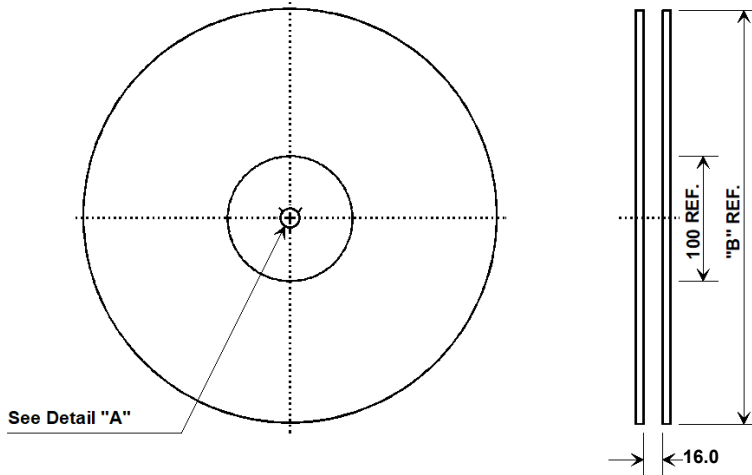
**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.****NOTES:**

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

Tape and Reel Specifications

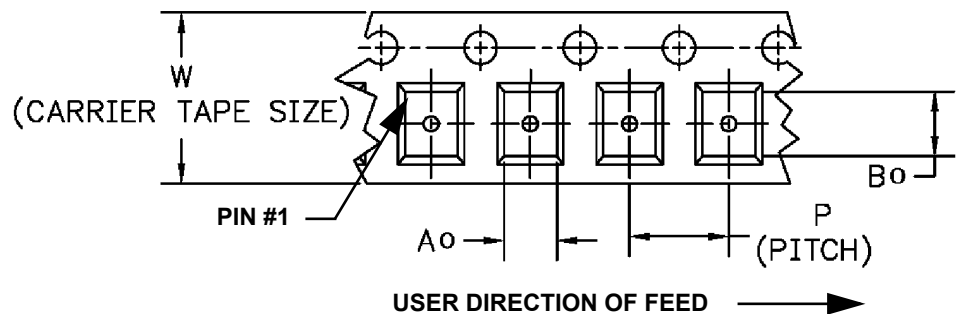
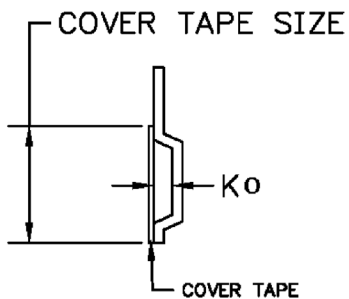
Tape and Reel Standard per ANSI/EIA-481

“B “ Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	2000

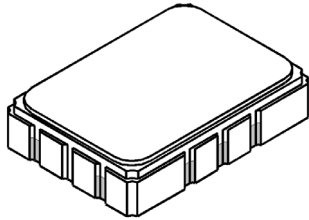


COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	5.5 mm
Bo	7.5 mm
Ko	2.0 mm
Pitch	8.0 mm
W	16.0 mm



10-Terminal Ceramic Surface-Mount Case 7 x 5 mm Nominal Footprint

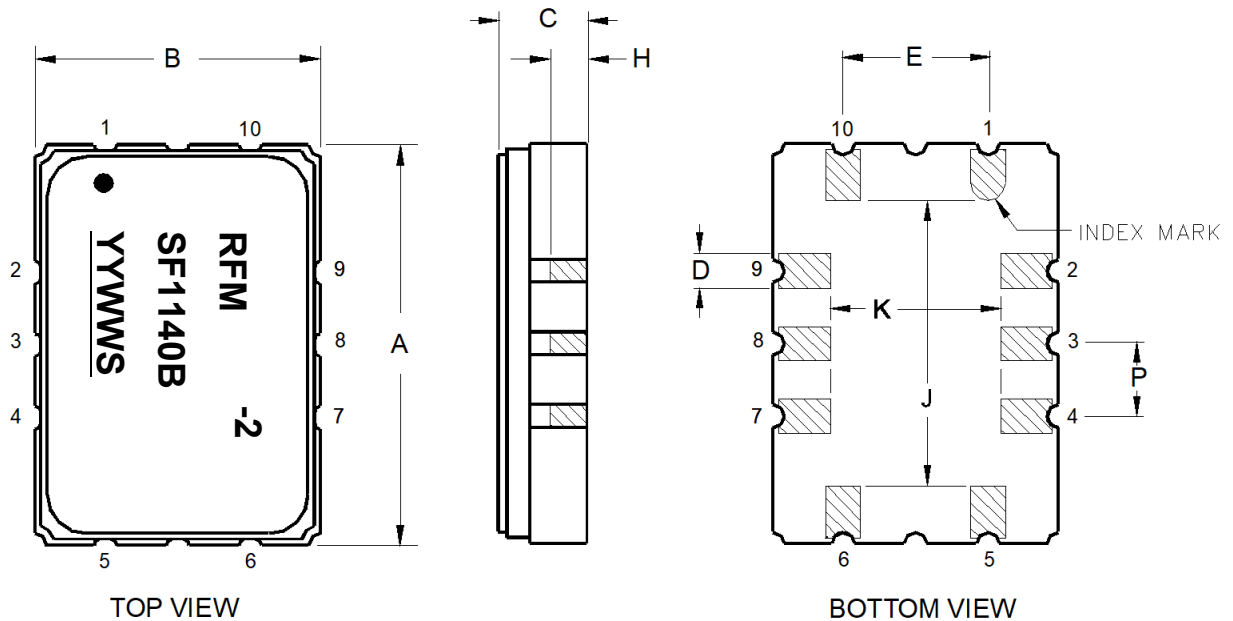


Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	6.80	7.00	7.20	0.268	0.276	0.283
B	4.80	5.00	5.20	0.189	0.197	0.205
C		1.65	2.00		0.065	0.079
D		0.60			0.024	
E		2.54			0.100	
H		1.0			0.039	
J		5.00			0.197	
K		3.00			0.118	
P		1.27			0.050	

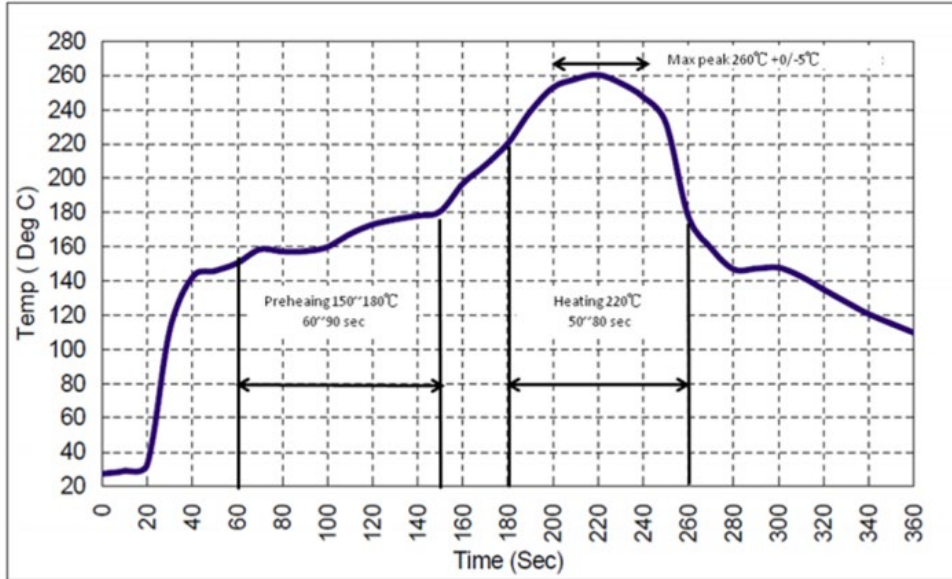
Electrical Connections

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



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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