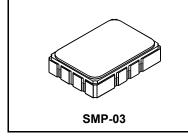


RFM products are now Murata products.

SF1145B

427.250 MHz **SAW Filter**



Low Insertion Loss

- 5.0 X 7.0 mm Surface-Mount Case
- 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 +85	°C
Suitable for lead-free soldering - Max Soldering Profile	260°C for 30 s	

Flectrical Characteristics

Characteristic		Sym	Notes	Min	Тур	Max	Units
Nominal Center Frequency		f _C	1		427.250		MHz
Passband	Insertion Loss at fc	IL	1 ' [3.5	dB
	1.5 dB Passband	BW ₁	1, 2	±15			kHz
Rejection (referenced to fc=427.250 MHz)	fc±1.5 MHz		1. 2. 3	5			
	fc±6.0 MHz		1, 2, 3	20			dB
	fc±50 MHz			50			1
Operating Temperature Range		T _A	1	-40		+85	°C
Differential Input and Output Impedance after matching				Ę	0 ohms		•
Case Style			6	SM	P-03 7 x 5 mm l	Nominal Footp	orint
Lid Symbolization (YY=year, WW=week, S=shift) See note 4			1 "		RFM SF1145	B YYWWS	

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:

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.

Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc.

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.

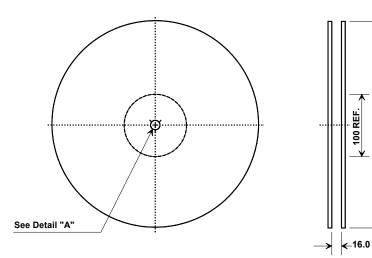
"LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."

The design, manufacturing process, and specifications of this filter are subject to change.

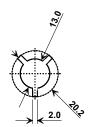
Tape and Reel Standard ANSI / EIA 481.

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.
US and international patents may apply.
Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

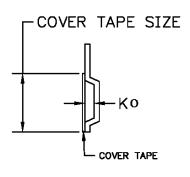
Tape and Reel Specifications



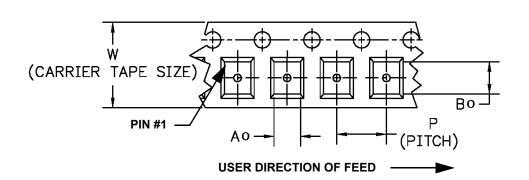
"B " Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	2000



COMPONENT ORIENTATION and DIMENSIONS

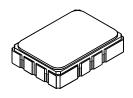


Carrier Tape Dimensions				
Ao	5.5 mm			
Во	7.5 mm			
Ко	2.0 mm			
Pitch	8.0 mm			
W	16.0 mm			

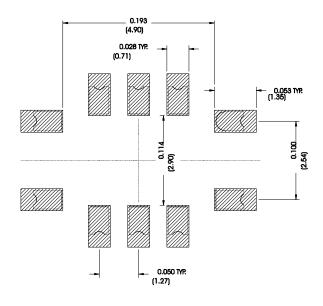


SMP-03 Case

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



Recommended PCB Footprint



Case Dimensions						
Dimension		mm	mm		Inches	
	Min	Nom	Max	Min	Nom	Max
Α	6.80	7.00	7.20	0.268	0.276	0.283
В	4.80	5.00	5.20	0.189	0.197	0.205
С		1.65	2.00		0.065	0.079
D		0.60			0.024	
E		2.54			0.100	
Н		1.0			0.039	
J		5.00			0.197	
K		3.00			0.118	
Р		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			
Differer	ntial Operation	Return is hot			

Materials				
Solder Pad Termination	Au plating 30 - 60 ulnches (76.2-152 uM) over 80-200 ulnches (203-508 uM) Ni.			
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 ulnches Thick			
Body	Al ₂ O ₃ Ceramic			
Pb Free				

