

# To Be Discontinued

#### Surface Mount 3.0 x 3.0 mm Package

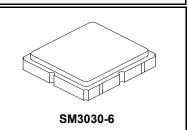
Complies with Directive 2002/95/EC (RoHS)



Rating	Value	Units
Input Power Level	10	dBm
DC Voltage on any Non-ground Terminal	3	V
Operable Temperature Range	-45 to +125	°C
Specification Temperature Range	-40 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C

# SF2395E

# 1224 MHz **SAW** Filter

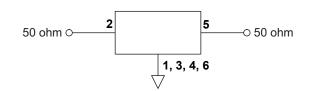


#### Electrical Characteristics - -40 to +85°C

Characteristic	Sym	Notes	Min	Тур	Max	Units
Center Frequency	f <sub>C</sub>			1224		MHz
Insertion Loss, (1170 to 1278 MHz)	IL			4.4	5.5	dB
Pass Band Ripple, (1170 to 1278 MHz)				2.4	3.5	UD UD
Group Delay Variation (1170 to 1278 MHz)				12	30	ns
Return Loss (1170 to 1278 MHz)			6	6.8		dB
Attenuation, Referenced from 0 dB:						
50 to 1025 MHz			18	27		dB
1320 to 2000 MHz			9	18		
Temperature coefficient of frequency				-80		Ppm/°C
Case Style		SM3030-6 3.0 x 3.0 mm Nominal Footprint				
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator		7A, YWWS				
Electrical Connections						

#### **Electrical Connections**

Connection	Terminals
Input	2
Output	5
Case Ground	All others



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

1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50  $\Omega$  and measured with 50  $\Omega$  network analyzer.

- 2
- 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. 3.
- "LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes." 4
- 5 The design, manufacturing process, and specifications of this filter are subject to change.
- 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 6. 2, so that the filter must always be installed in one direction per the circuit design. 7.
- US and international patents may apply. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd. 8.

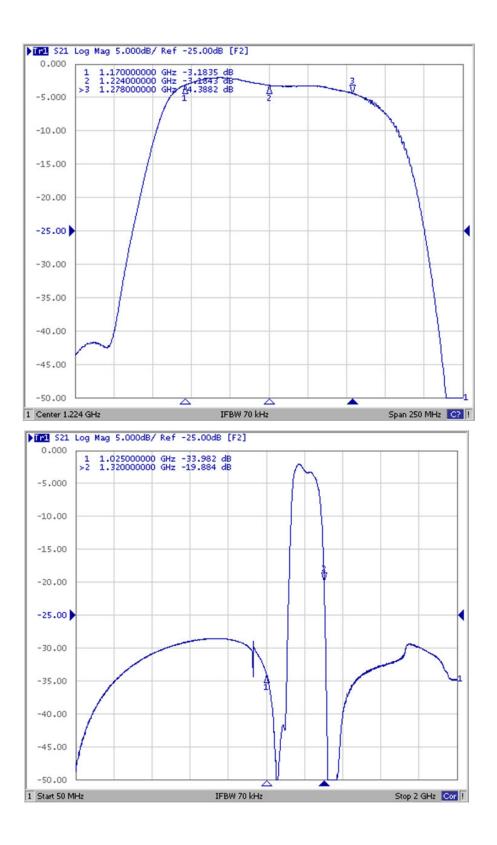
### Absolute Maximum Ratings - -40 to +105°C

Rating	Value	Units
Input Power Level	10	dBm
DC Voltage on any Non-ground Terminal	3	V
Operable Temperature Range	-45 to +125	°C
Specification Temperature Range	-40 to +105	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C

### Electrical Characteristics - -40 to +105°C

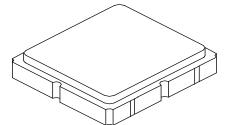
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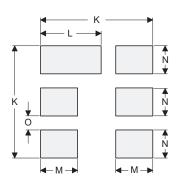
## **Frequency Characteristics**



# SM3030-6 Case

## 6-Terminal Ceramic Surface-Mount Case 3.0 X 3.0 mm Nominal Footprint





**PCB** Footprint Top View

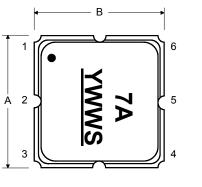
Dimension	mm		Inches			
Dimension	Min	Nom	Max	Min	Nom	Max
Α	2.99	3.00	3.01	0.117	0.118	0.118
В	2.99	3.00	3.01	0.117	0.118	0.118
С	-	-	1.40	-	-	0.054
D	-	0.90	-	-	0.035	-
E	2.39	2.54	2.69	0.094	0.110	0.105
F	1.45	1.60	1.75	0.057	0.063	0.068
G	0.70	0.85	1.00	0.027	0.033	0.039
н	1.35	1.50	1.65	0.053	0.059	0.064
I	0.45	0.60	0.75	0.017	0.024	0.029
J	1.15	1.30	1.45	0.045	0.051	0.057
к	-	3.20	-	-	0.126	-
L	-	1.70	-	-	0.067	-
м	-	1.05	-	-	0.041	-
N	-	0.81	-	-	0.032	-
0	-	0.38	-	-	0.015	-

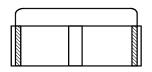
### **Case and PCB Footprint Dimensions**

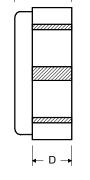
### **Case Materials**

Materials				
Solder Pad Plating	0.3 to 1.0 $\mu m$ Gold over 1.27 to 8.89 $\mu m$ Nickel			
Lid Plating 2.0 to 3.0 µm Nickel				
Body Al <sub>2</sub> O <sub>3</sub> Ceramic				
Pb Free				

**TOP VIEW** 

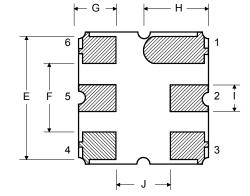




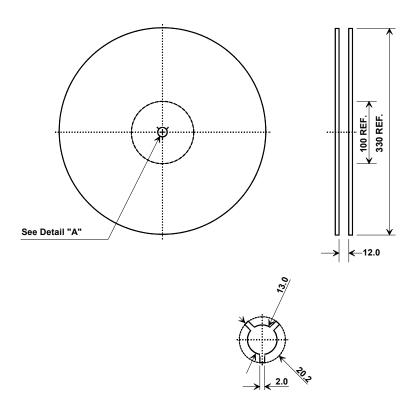


С

## **BOTTOM VIEW**

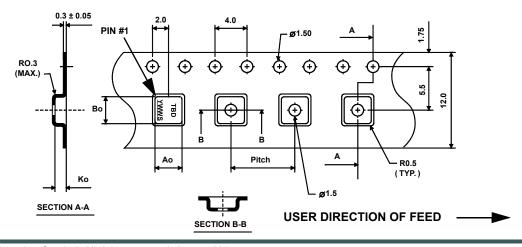


### **Tape and Reel Specifications**



### **COMPONENT ORIENTATION and DIMENSIONS**

Carrier Tape Dimensions					
Ao	3.35 mm				
Во	3.35 mm				
Ko	1.40 mm				
Pitch	8.0 mm				
W	12.0 mm				



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