muRata
INNOVATOR IN ELECTRONICS

SF2081E

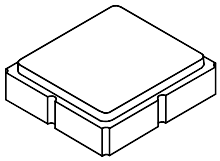
1220 MHz SAW Filter

- ***SAW Filter for Cable System***
- ***Complies with Directive 2002/95/EC (RoHS)***

Characteristics:

Balanced-to-balanced operation

Terminating source/load impedance : Z_S = 200 Ω



SM3030-8

Maximum Rating

Rating	Value	Units
Input Power Level	0	dBm
DC Voltage on any Non-ground Terminal	3	V
Operating Temperature Range	-30 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Suitable for Lead-free Soldering - Maximum Soldering Profile	260°C for 30 s	

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			1220		MHz
Insertion Loss, 1195 to 1245 MHz	IL			3.0	4.0	dB
3 dB Bandwidth	BW_3		50	56		MHz
Amplitude Ripple, 1200 to 1240 MHz, -30 to +45 °C				2.0	2.2	dB
Attenuation Referenced to Minimum Insertion Loss:						
F < f_C - 48 MHz			35	44		dB
F > f_C + 48 MHz			30	40		
Group Delay Ripple				35	100	ns_{P-P}

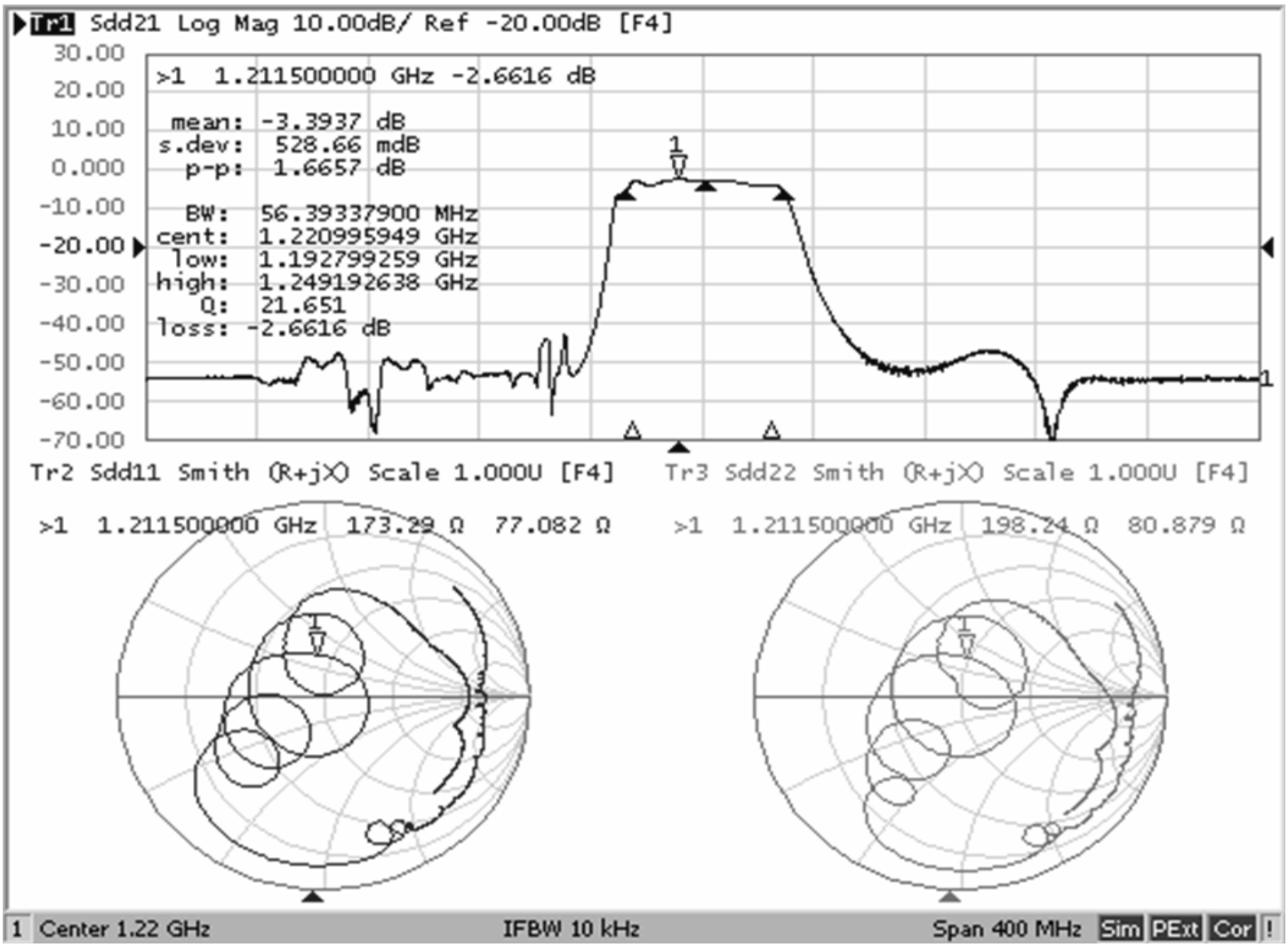
Case Style		SM3030-8 3.0 x 3.0 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator		840, YWWS
Standard Reel Quantity	Reel Size 7 Inch	500 Pieces/Reel
	Reel Size 13 Inch	3000 Pieces/Reel

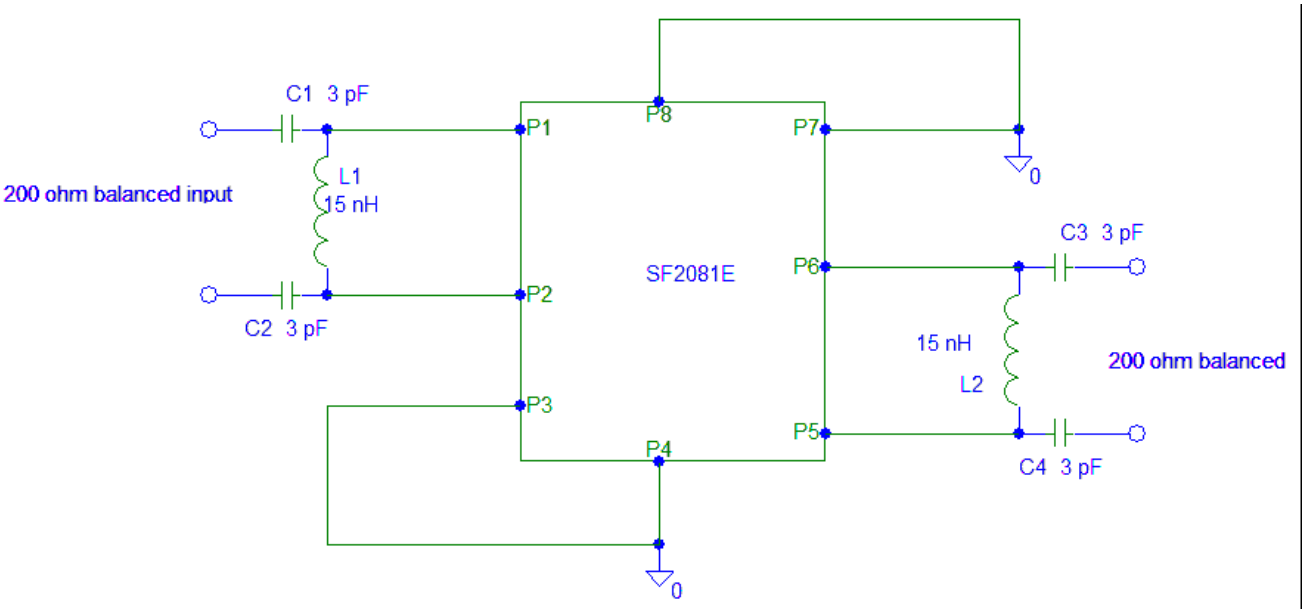
	Connection	Terminals
Port 1	Balanced Input	1,2
Port 2	Balanced Output	5,6
	Ground	All Others
Dot Indicates Pin 1		

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

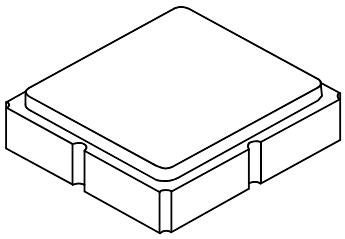
NOTES:

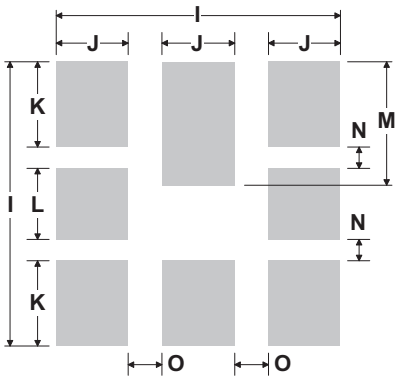
1. US and international patents may apply.
2. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.
3. Electrostatic Sensitive Device. Observe precautions for handling.





8-Terminal Ceramic Surface-Mount Case
3.0 X 3.0 mm Nominal Footprint





PCB Footprint Top View

Case and PCB Footprint Dimensions

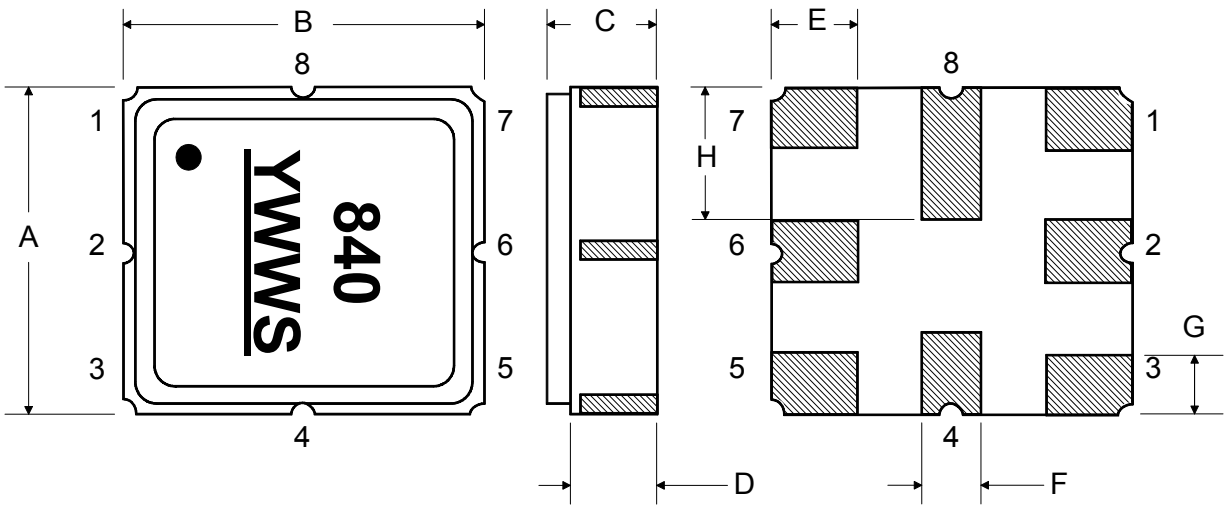
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.0	3.13	0.113	0.118	0.123
B	2.87	3.0	3.13	0.113	0.118	0.123
C	1.14	1.27	1.40	0.045	0.050	0.055
D	0.79	0.92	1.05	0.031	0.036	0.041
E	0.62	0.75	0.88	0.024	0.029	0.034
F	0.47	0.60	0.73	0.018	0.024	0.029
G	0.47	0.60	0.73	0.018	0.024	0.029
H	1.07	1.20	1.33	0.042	0.047	0.052
I		3.19			0.126	
J		0.81			0.032	
K		0.96			0.038	
L		0.81			0.032	
M		1.39			0.055	
N		0.23			0.009	
O		0.38			0.015	

Case Materials

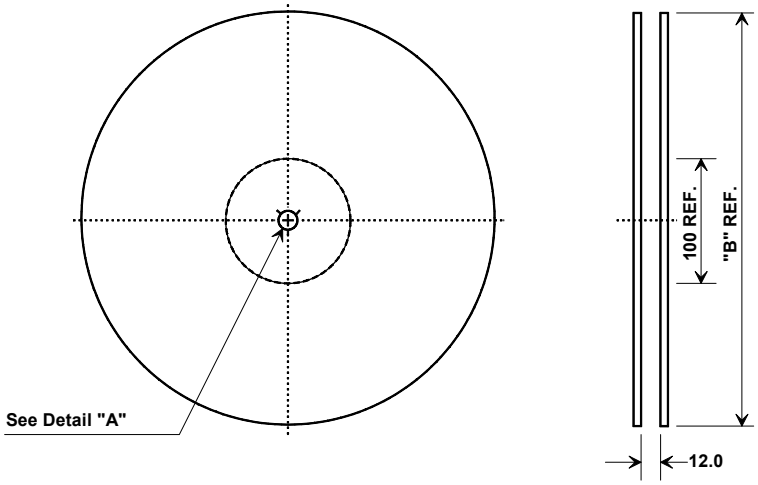
Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic
Pb Free	

TOP VIEW

BOTTOM VIEW



Tape and Reel Specifications



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

Carrier Tape Dimensions	
Ao	3.35 mm
Bo	3.35 mm
Ko	1.4 mm
Pitch	8.0 mm
W	12.0 mm

COMPONENT ORIENTATION and DIMENSIONS