muRata
INNOVATOR IN ELECTRONICS

SF2166E

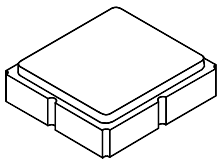
1280.18 MHz

- ***SAW Filter for Digital Television***
- ***Complies with Directive 2002/95/EC (RoHS)***

Characteristics:

Balance-to-balanced operation

Terminating source/load impedance : Z_S = 150 Ω



SM3030-8

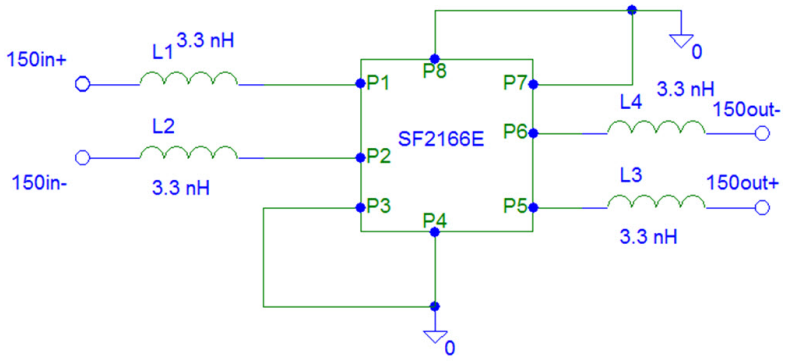
Maximum Rating

Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage on any Non-ground Terminal	3	V
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range	-50 to +95	°C
Maximum Soldering Profile, 5 cycles/ 10 seconds maximum	265	°C

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			1280.18		MHz
Insertion Loss, 1260.18 to 1300.18 MHz	IL			3.2	4.5	dB
Amplitude Ripple, 1260.18 to 1300.18 MHz				1.0	2.3	dB
Group Delay Ripple, 1260.18 to 1300.18 MHz				20	30	ns_{P-P}
Attenuation, 0 dB Reference:						
100 to 1198.12 MHz			47	50		dB
1362.24 to 2000 MHz			45	55		
2000 to 6000 MHz			30	40		

Case Style	SM3030-8 3.0 x 3.0 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	858, YWWS
Standard Reel Quantity Reel Size 7 inch	500 Pieces/Reel
Reel Size 13 inch	3000 Pieces/Reel

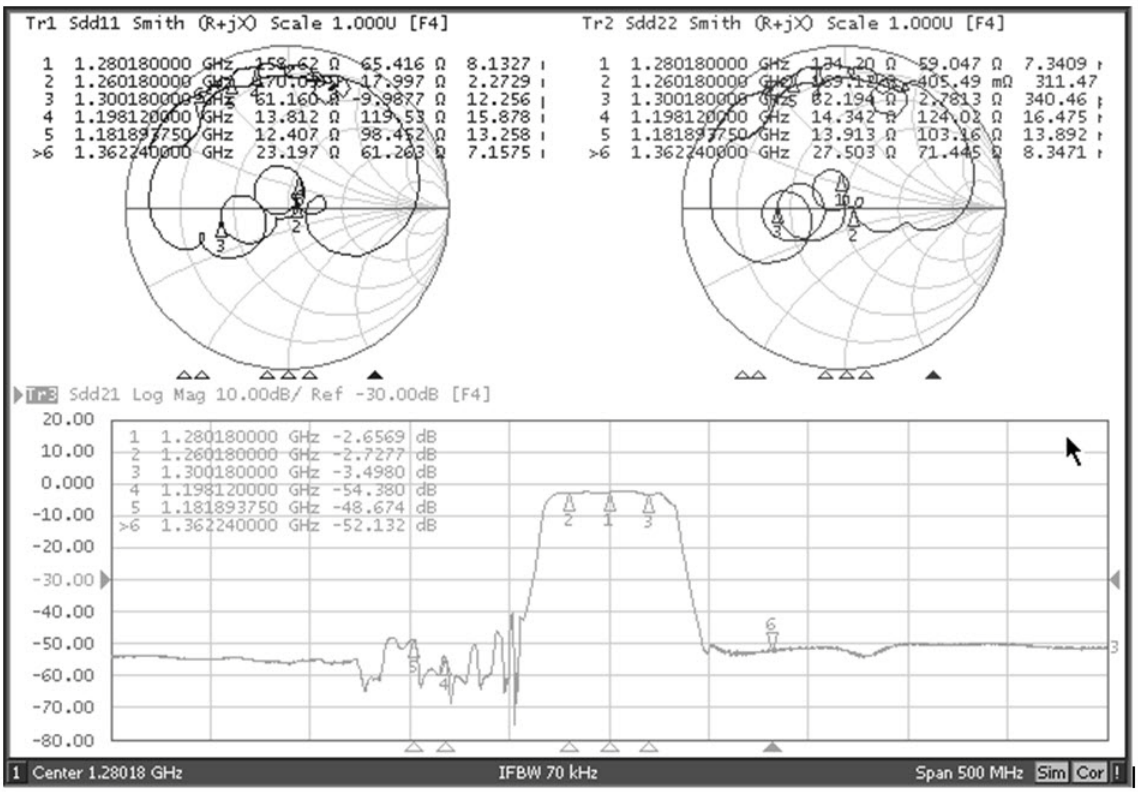
Tuning Network, 150 ohm Balanced Source/Load



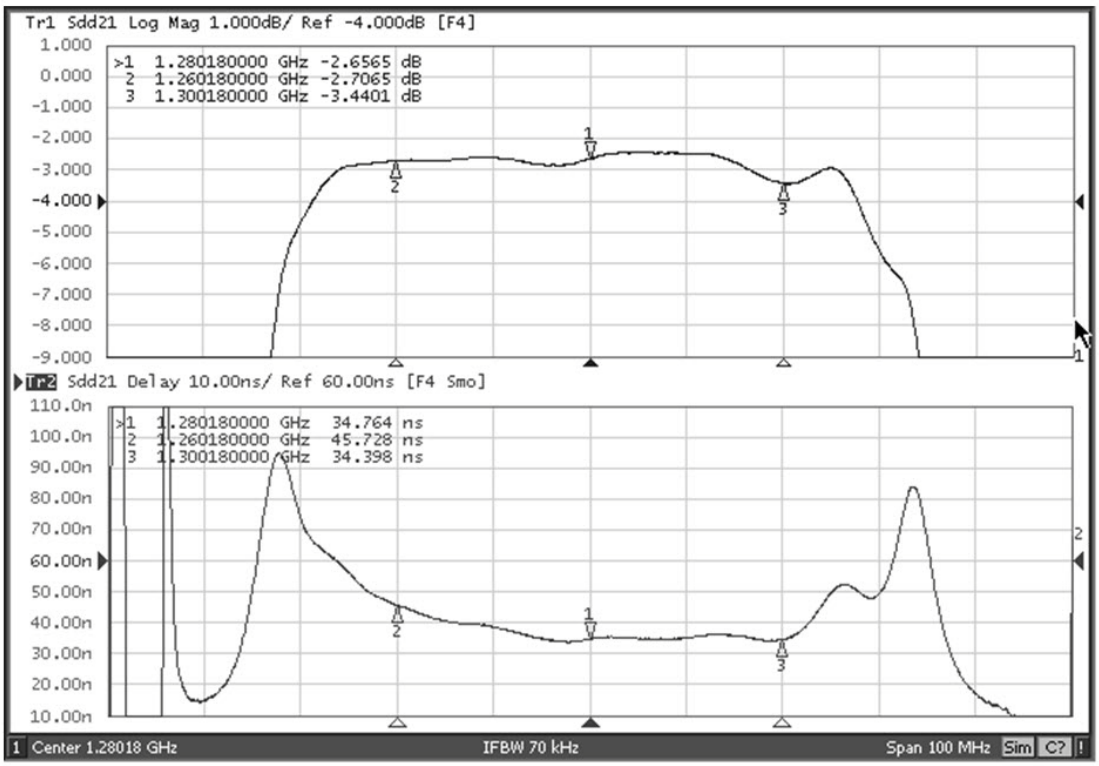
NOTES:

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.

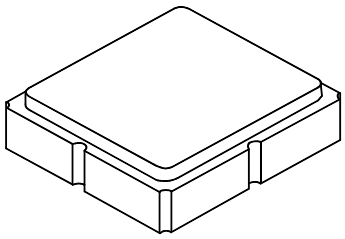
Filter S21, S11 and S22 Plots



Filter Passband and Group Delay Plot

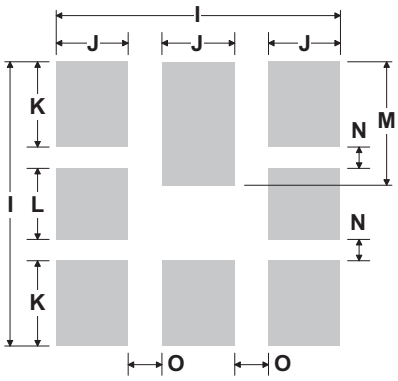


8-Terminal Ceramic Surface-Mount Case
3.0 X 3.0 mm Nominal Footprint



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	-



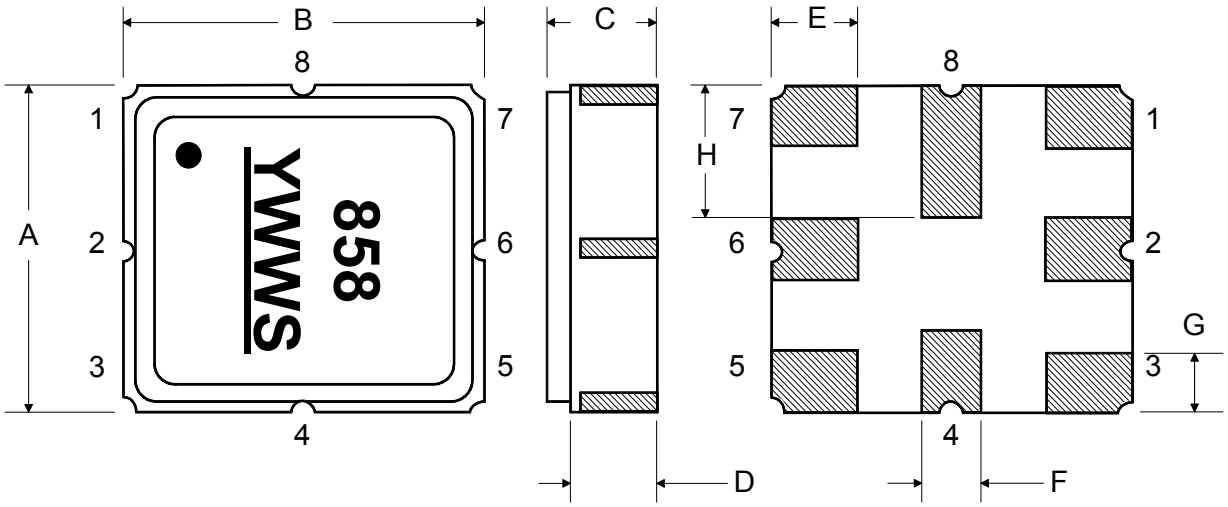
PCB Footprint Top View

Case Materials

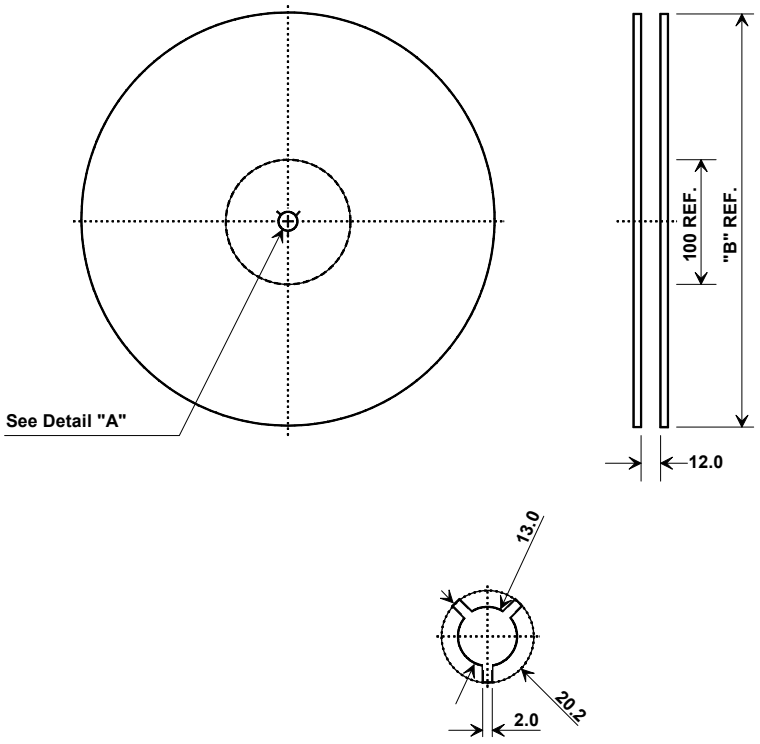
Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic
Pb Free	

TOP VIEW

BOTTOM VIEW



Tape and Reel Specifications



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

COMPONENT ORIENTATION and DIMENSIONS

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