

- **SAW Filter for Digital Television**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Meets AEC-Q200 Standards**



Characteristics:

Balance-to-balanced operation

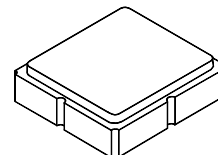
Terminating source/load impedance : $Z_S = 150 \Omega$

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

SF2166E

1280.18 MHz

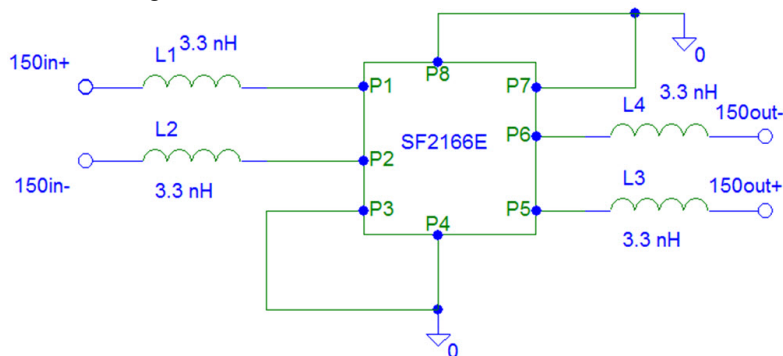


SM3030-8

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				

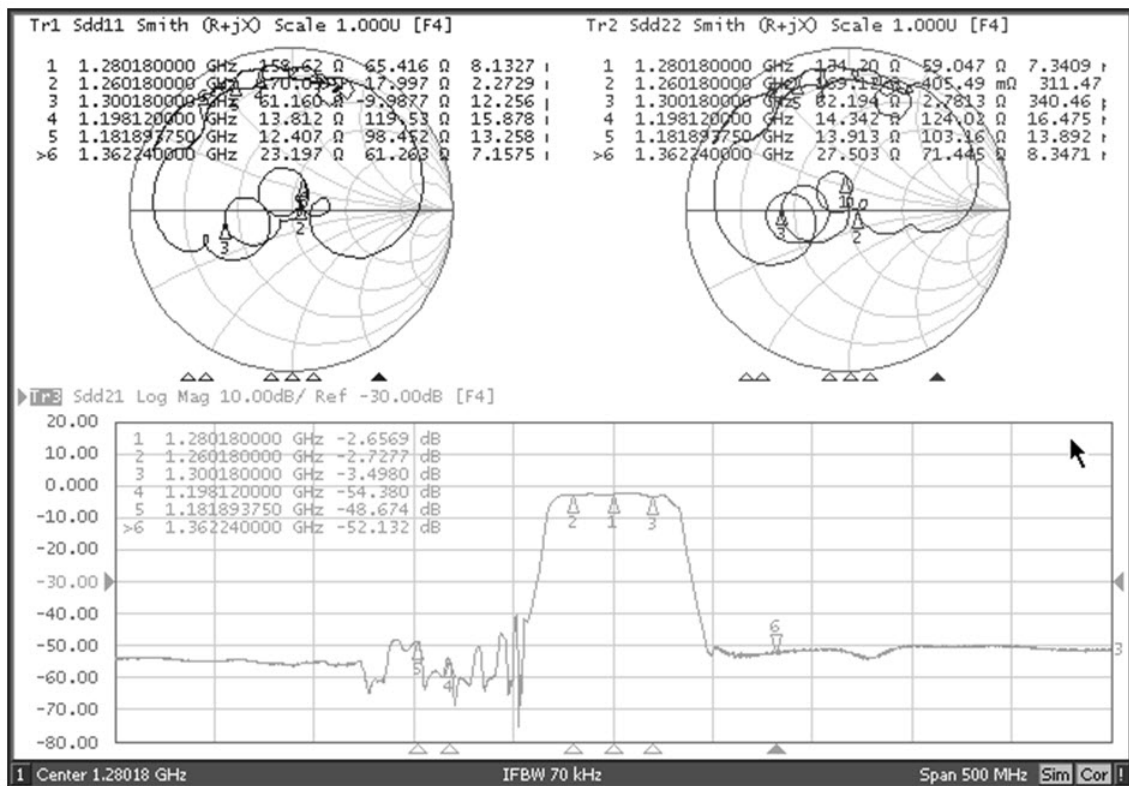
Tuning Network, 150 ohm Balanced Source/Load



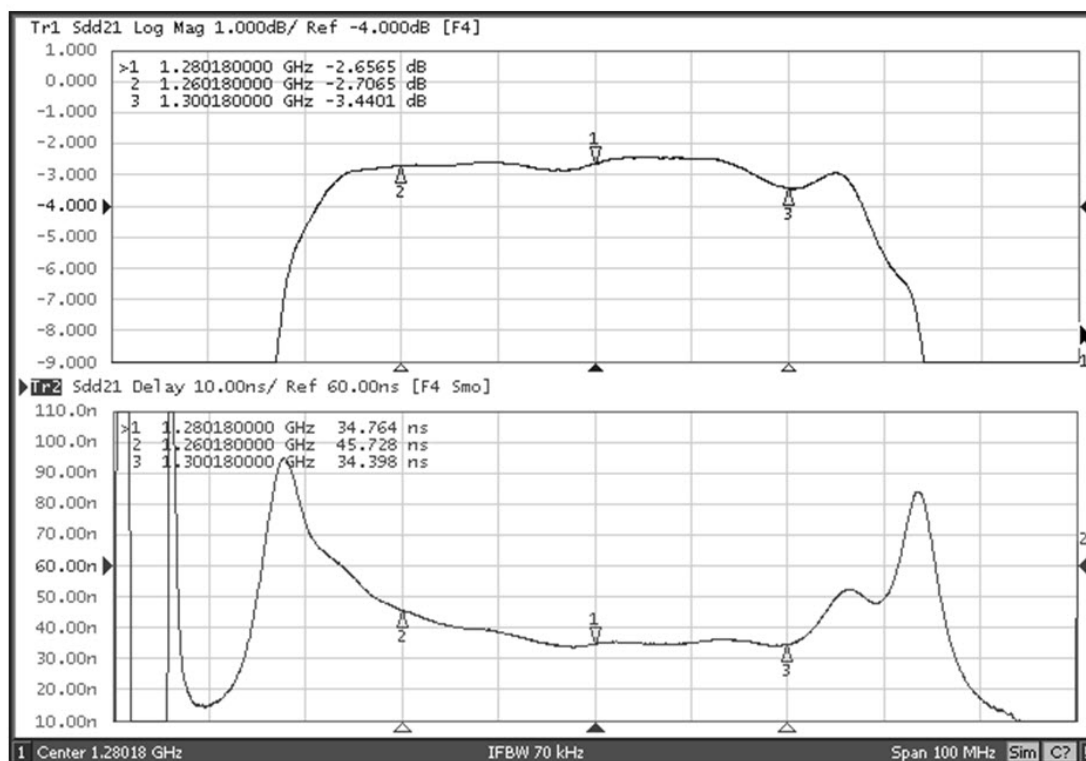
NOTES:

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.

Filter S21, S11 and S22 Plots

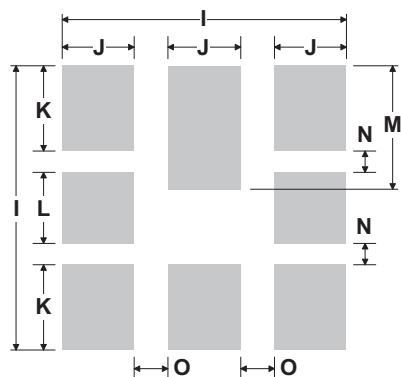
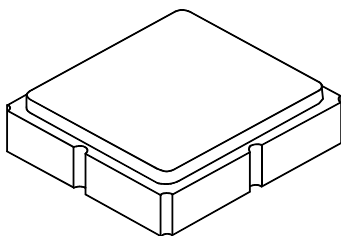


Filter Passband and Group Delay Plot



8-Terminal Ceramic Surface-Mount Case

3.0 X 3.0 mm Nominal Footprint



PCB Footprint Top View

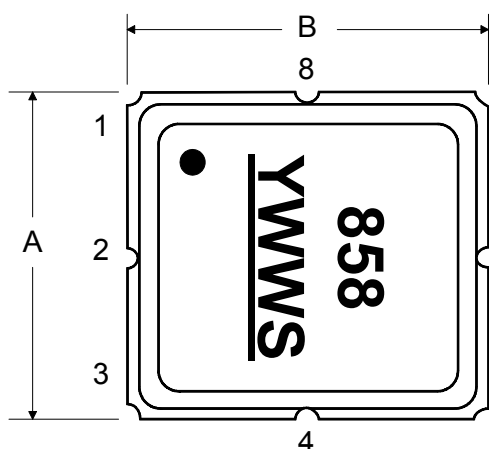
Case and PCB Footprint Dimensions

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	-

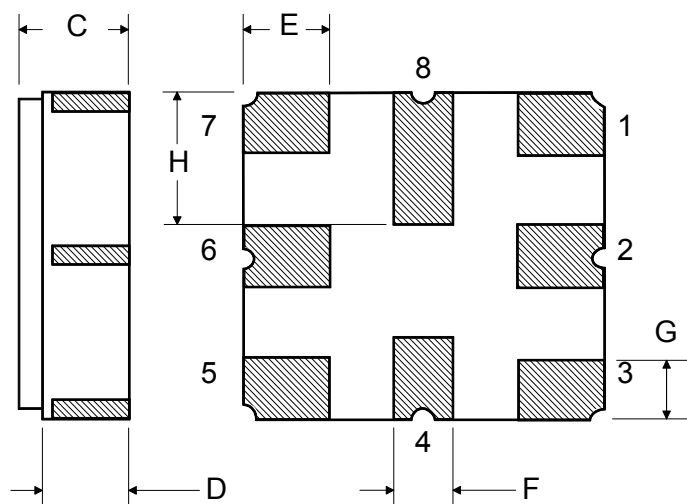
Case Materials

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



Technical drawing of a circular component, likely a flange or end plate, showing three views: a top view, a side view, and a detail view.

Top View: A large circle with a smaller concentric circle in the center. A crosshair indicates the center. A leader line points from the text "See Detail 'A'" to the central hole.

Side View: A vertical cross-section showing the thickness of the component. The total thickness is dimensioned as 12.0. The central hole has a diameter of 100 REF. The outer diameter is dimensioned as "B" REF.

Detail View (Detail A): A cross-section of the central hole. It shows a circular hole with a diameter of 20.2. The hole is surrounded by a ring with a thickness of 2.0. The outer diameter of this ring is dimensioned as 13.0.

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

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

