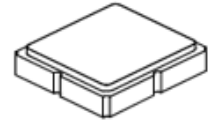


- **Low-loss RF SAW Filter**
- **Miniature 3 x 3 mm SMD Package**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

SF2749E
**866.5 MHz
SAW Filter**

SM3030-6
Absolute Maximum Ratings

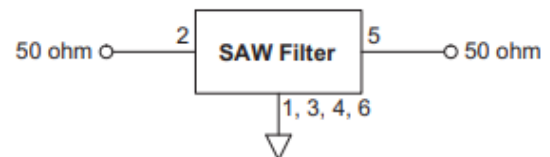
Rating	Value	Units
Input Power Level	+18	dBm
DC Voltage on any Non-grounded Terminal	3	V
Operable Temperature Range	-40 to +85	°C
Storage Temperature Range	-40 to +85	°C
Maximum Soldering Profile, 2 cycles/10 seconds minimum	260	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_c			866.5		MHz
Insertion Loss @ f_c Amax	IL			2.3	3.0	dB
Amplitude Ripple 863 - 870 MHz				0.3	1.3	dB
VSWR 863 - 870 MHz				1.2	2.0	
Attenuation, Referenced to 0 dB:						dB
10 - 830 MHz			45	49		
830 - 850 MHz			22	35		
885 - 905 MHz			27	35		
905 - 950 MHz			45	49		
950 - 1500 MHz			40	57		
1500 - 3000 MHz			25	28		
Load / Source Impedance	Z_s Z_L			50		Ω
Case Style	SM3030-6 3.0 x 3.0 mm Nominal Footprint					
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	AA, YWWS					
Standard Reel Quantity Reel Size 7 inch	1000 Pieces/Reel					
Reel Size 13 inch	3000 Pieces/Reel					

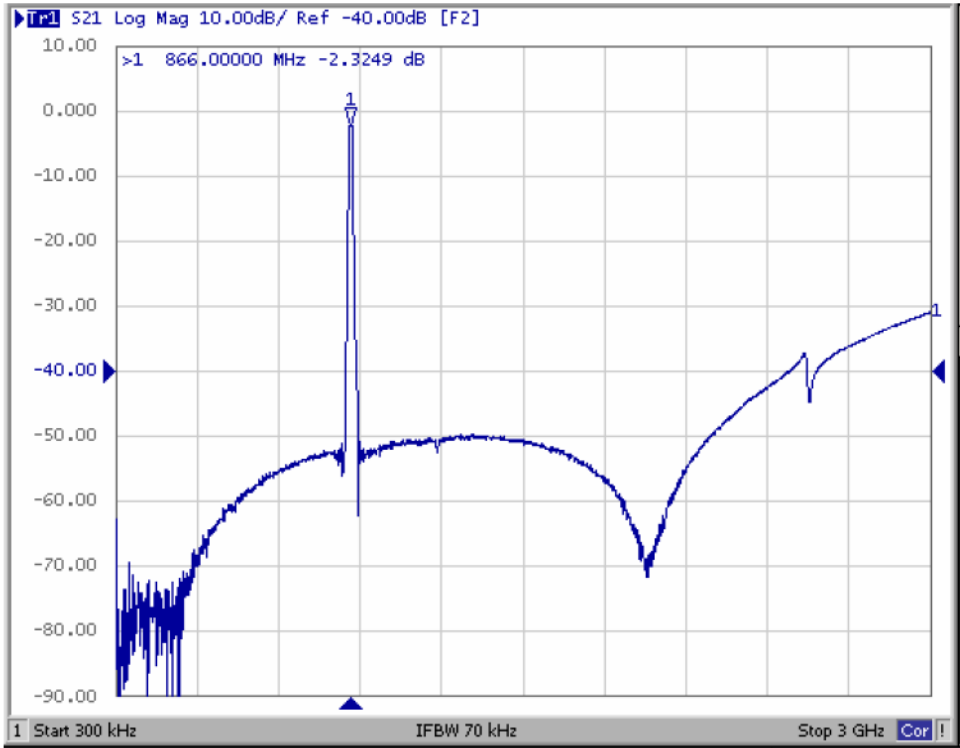
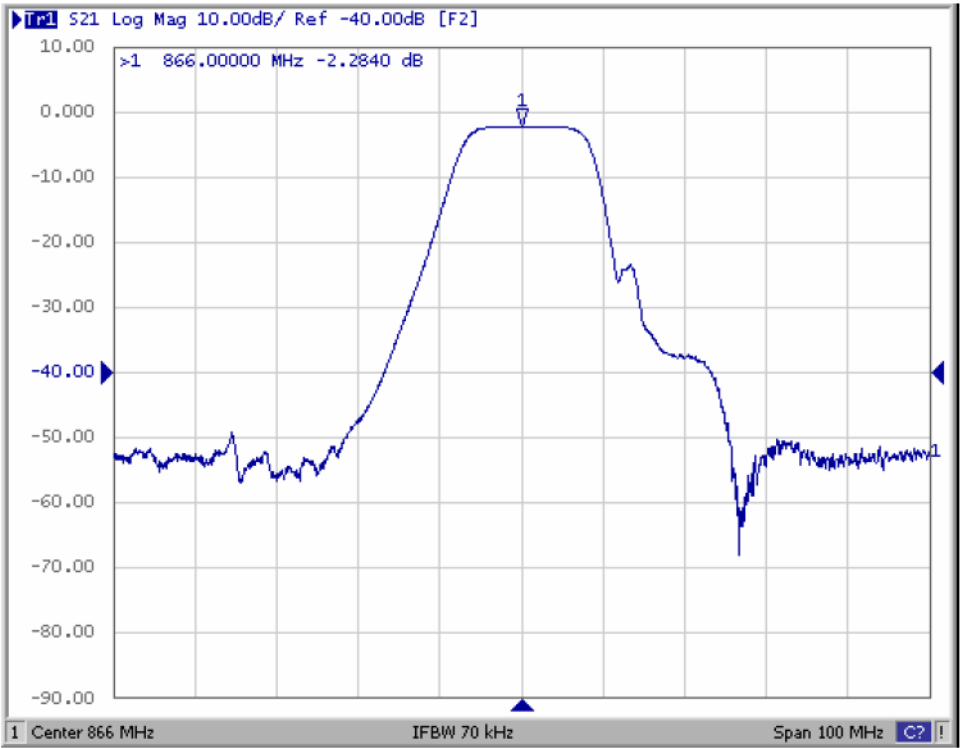
Electrical Connections

Connection	Terminals
Input	2
Output	5
Case Ground	All others


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

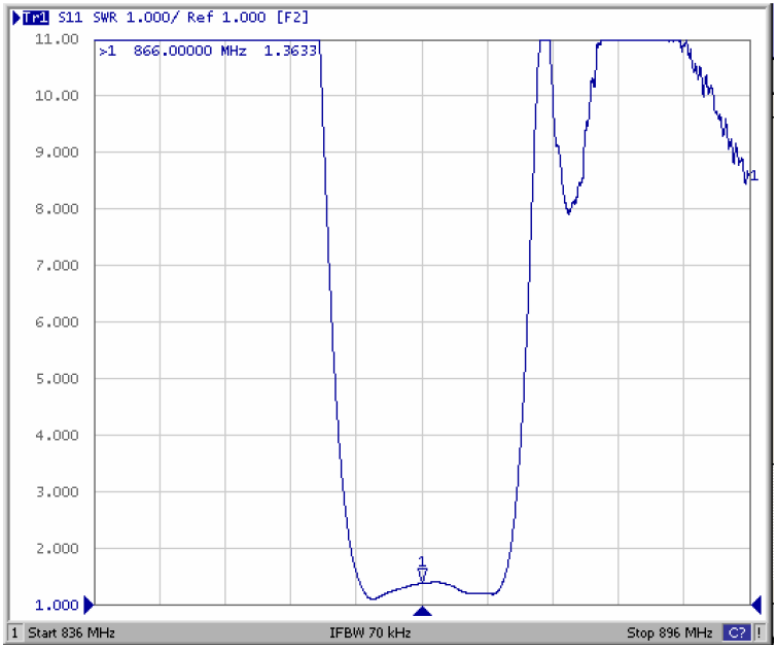
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics

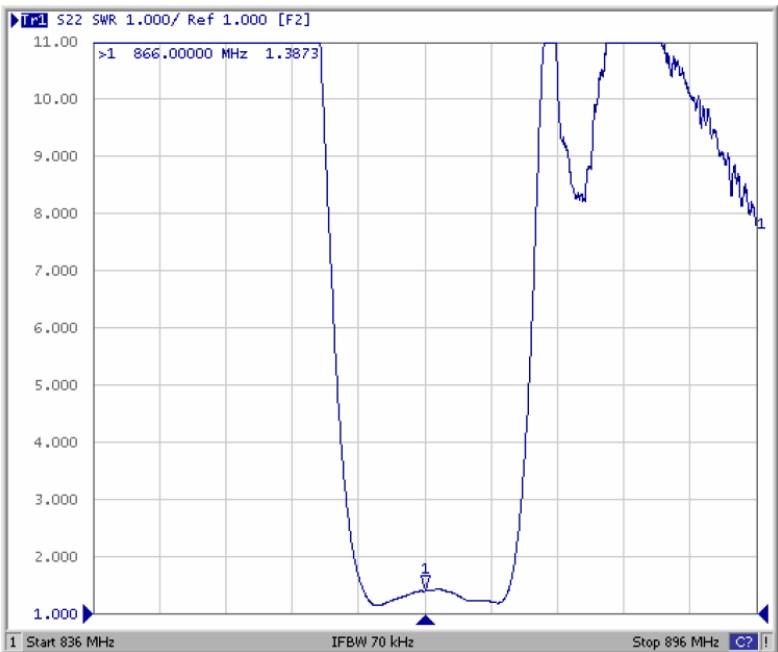


Frequency Characteristics

S11

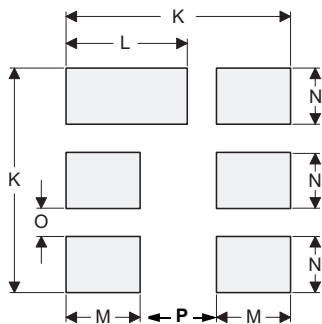
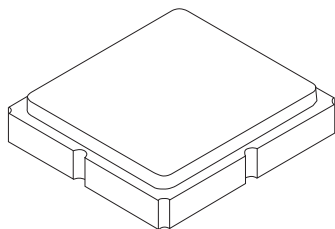


S22



SM3030-6 Case

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



PCB Footprint Top View

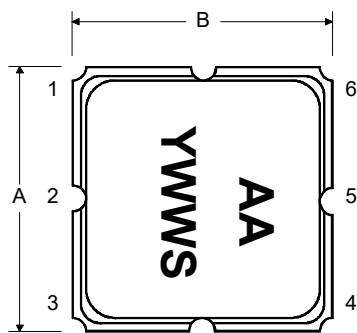
Case and PCB Footprint Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.00	3.13	0.113	0.118	0.123
B	2.87	3.00	3.13	0.113	0.118	0.123
C	-	-	1.40	0.044	0.049	0.054
D	0.77	0.90	1.03	0.030	0.035	0.040
E	2.67	2.80	2.93	0.105	0.110	0.115
F	1.47	1.60	1.73	0.058	0.063	0.068
G	0.72	0.85	0.98	0.028	0.033	0.038
H	1.37	1.50	1.63	0.054	0.059	0.064
I	0.47	0.60	0.73	0.019	0.024	0.029
J	1.17	1.30	1.43	0.046	0.051	0.056
K	-	3.20	-	-	0.126	-
L	-	1.70	-	-	0.067	-
M	-	1.05	-	-	0.041	-
N	-	0.81	-	-	0.032	-
O	-	0.38	-	-	0.015	-
P	-	1.09	-	-	0.039	-

Case Materials

Materials	
Solder Pad Plating	0.3 to 1.0 μ m Gold over 1.27 to 8.89 μ m Nickel
Lid Plating	2.0 to 3.0 μ m Nickel
Body	Al ₂ O ₃ Ceramic

TOP VIEW



BOTTOM VIEW

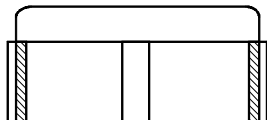
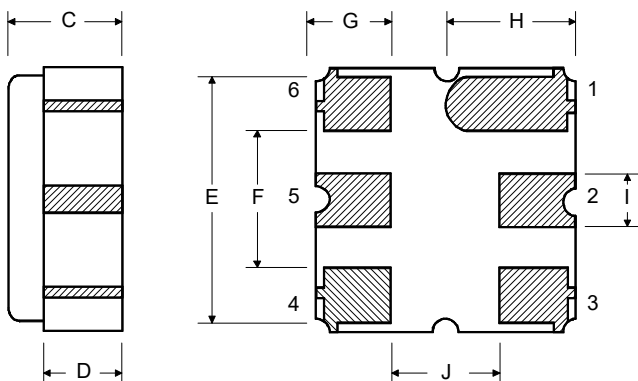
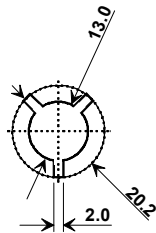


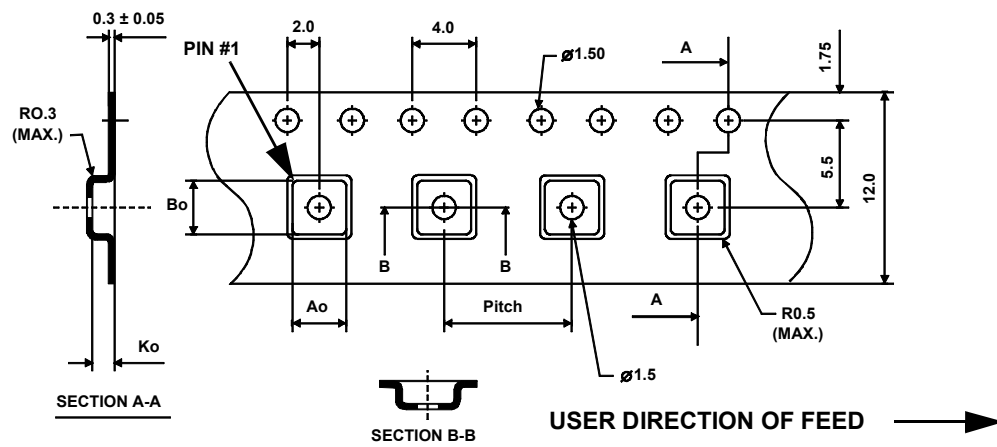
Diagram illustrating the setup for measuring the wavelength of light using a double-slit interference experiment. The distance between the two slits is labeled as 12.0 cm. The central maximum is marked with a dashed line. The distance to the 100th order maximum is labeled "100 REF." and the distance to the 8th order maximum is labeled "8th REF."

See Detail "A"

“B”		Quantity Per Reel
Inches	millimeters	
7	178	1000
13	330	3000



Carrier Tape Dimensions	
Ao	3.35 ±0.1 mm
Bo	3.35 ±0.1 mm
Ko	1.40 ±0.1 mm
Pitch	8.0 ±0.05 mm
W	12.0 ±0.3 mm



RECOMMENDED REFLOW PROFILE

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (20 - 40 sec)
4. Time: 2 times.

