

SM3030-6

MAXIMUM RATING:

- Input Power Level: 20 dBm
- DC Voltage : 0V
- Operating Temperature: -40°C to +85°C
- Storage Temperature: -40°C to +85°C
- Moisture Sensitivity Level: 1

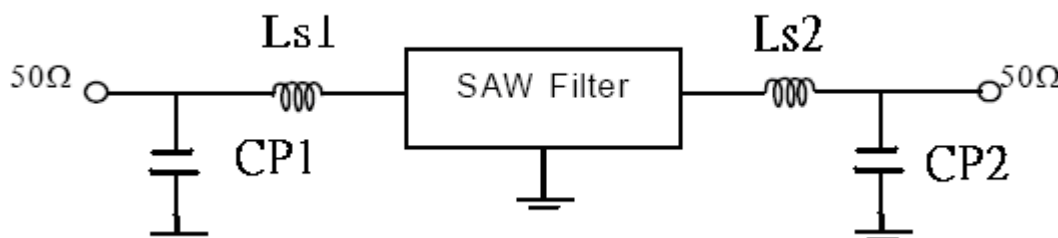
ELECTRICAL CHARACTERISTICS:

Terminating source/load impedance (single) : $Z_s = 50 \Omega / Z_L = 50 \Omega$

Item	Unit	Min	Type.	Max
Center Frequency F_c	MHz	-	869.225	-
Incl. Loss in matching elements (868.3 ~ 870.15 MHz)	dB		3.10	3.40
Amplitude Ripple (868.3 ~ 870.15 MHz)			0.61	2.50
Relative Attenuation (Reference level from 0 dB)				
10 ~ 350 MHz	dB	50	69	
350 ~ 600 MHz	dB	35	62	
600 ~ 846 MHz	dB	35	38	
846 ~ 862 MHz	dB	15	35	
880 ~ 889 MHz	dB	30	40	
889 ~ 1000 MHz	dB	30	33	
1000 ~ 1700 MHz	dB	52	59	
1700 ~ 2500 MHz	dB	42	88	

MEASUREMENT CIRCUIT:

The matching circuit is



$L_{s1}, L_{s2} = 27\text{nH}; C_{p1} = 5.6 \text{ pF}; C_{p2} = 6 \text{ pF}$

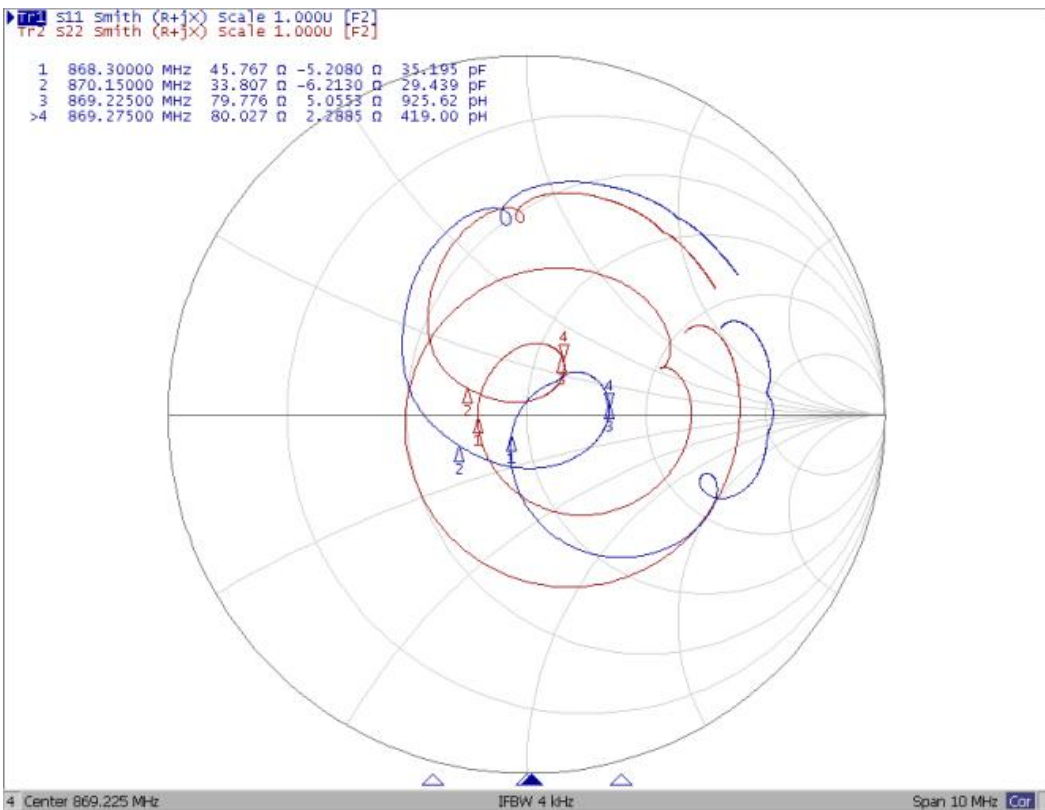
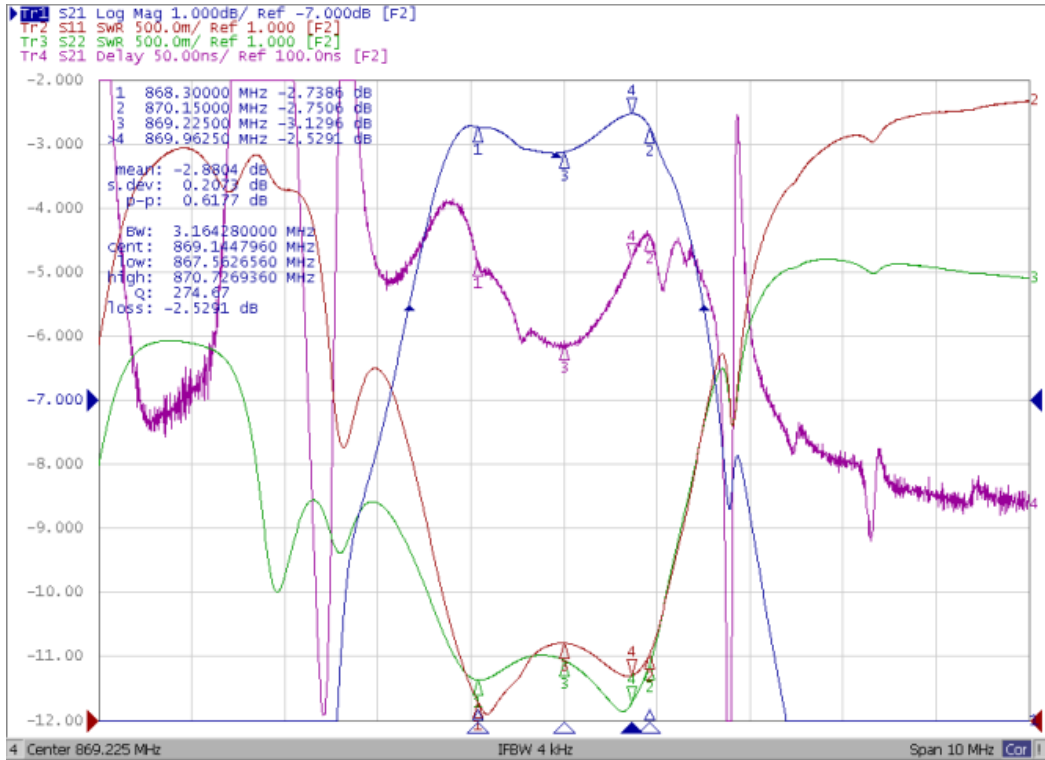


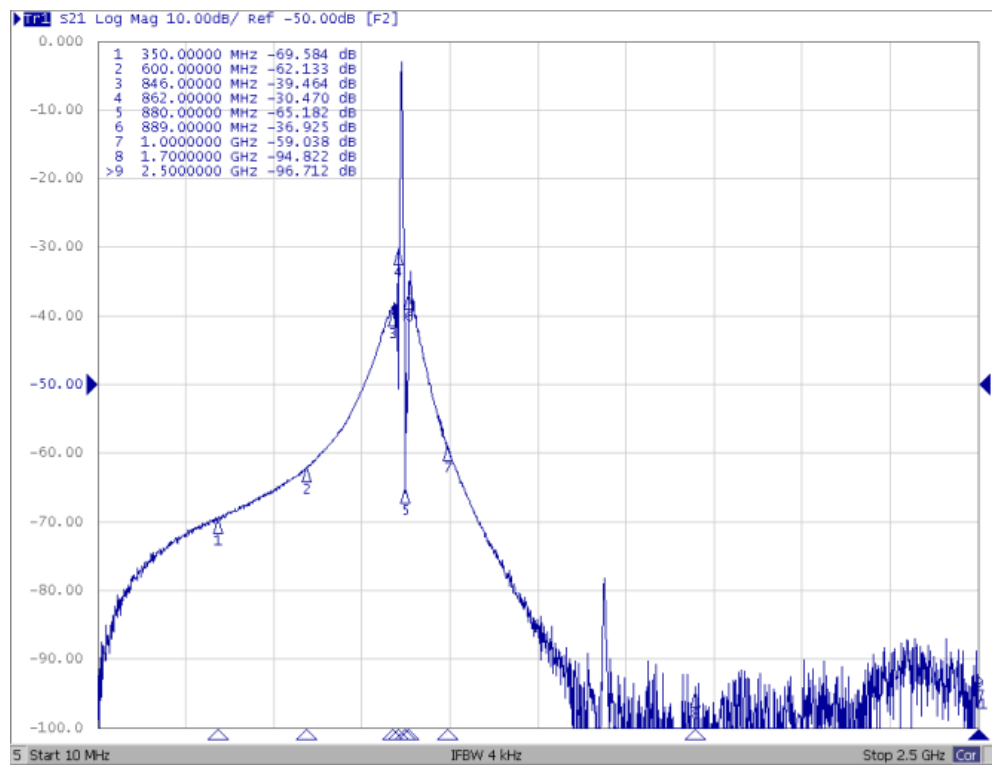
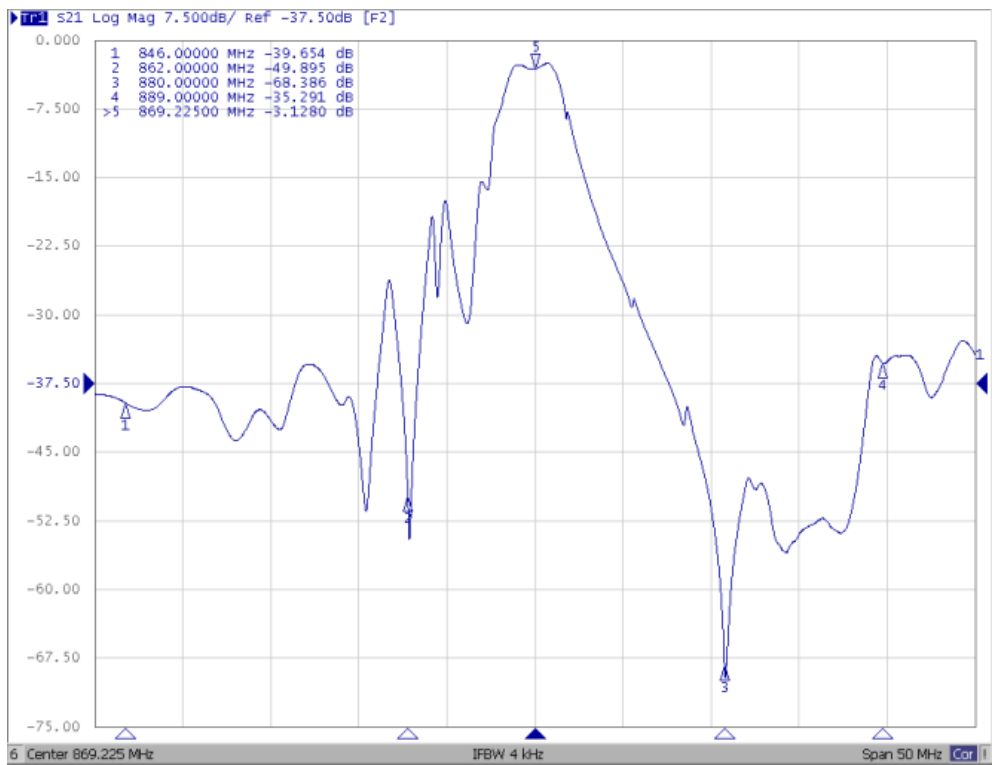
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

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:

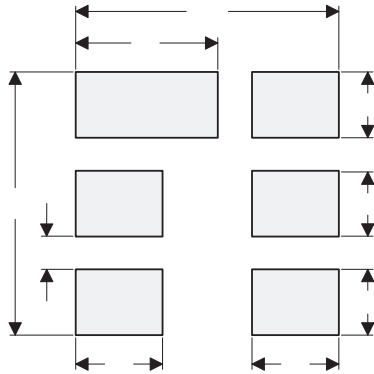
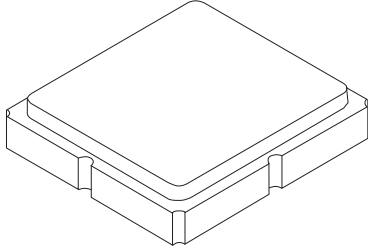




SM3030-6 Case

6-Terminal Ceramic Surface-Mount Case

3.0 X 3.0 mm Nominal Footprint



PCB Footprint Top View

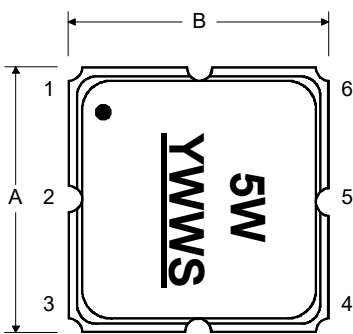
Case and PCB Footprint Dimensions

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	1.12	1.25	1.38	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	

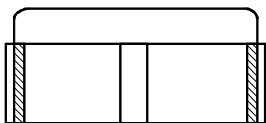
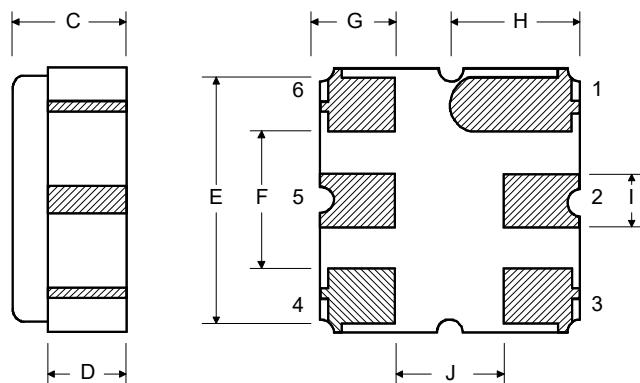
Case Materials

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

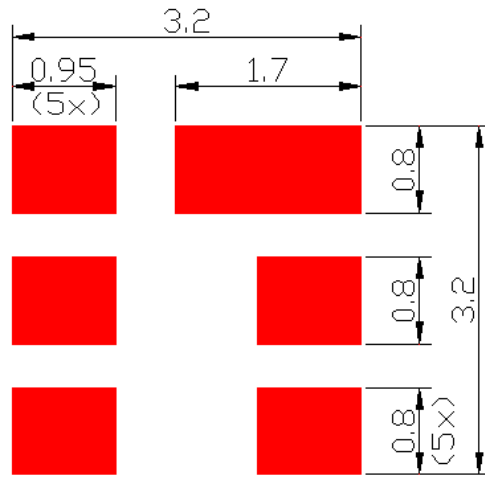
Top View



Bottom View



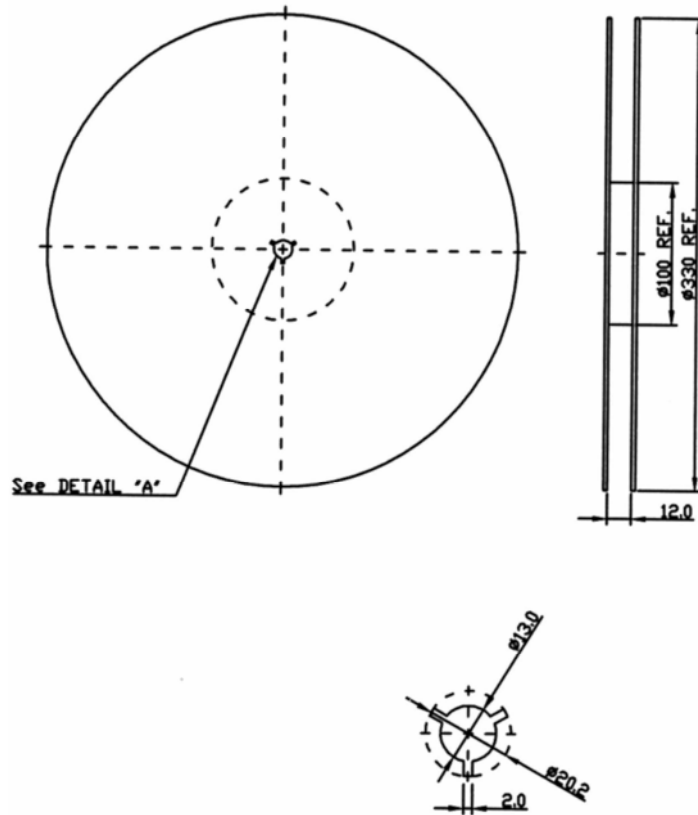
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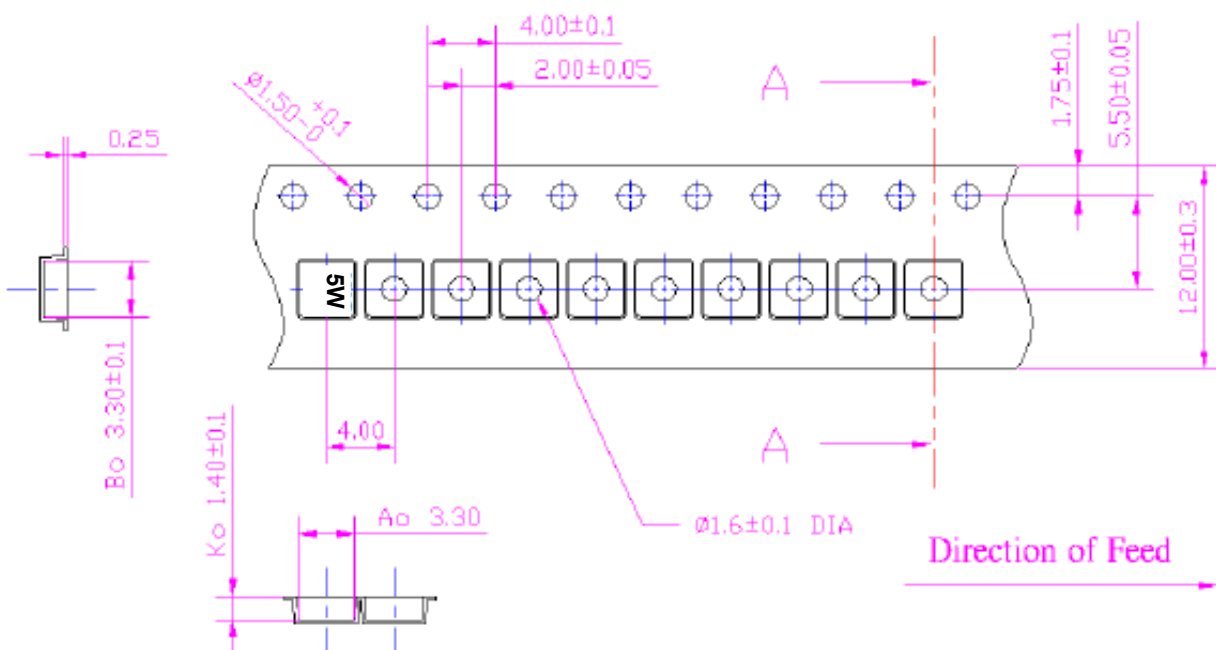
PACKING:

1. REEL DIMENSION

Reel Qty: 7" = 500, 13" = 3000



2. TAPE DIMENSION



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 (20~40sec).
4. Time: 2 times.

