



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



- Low Loss SAW Filter
- Surface Mount 3.0 x 3.0 mm Package
- Complies with Directive 2002/95/EC (RoHS)

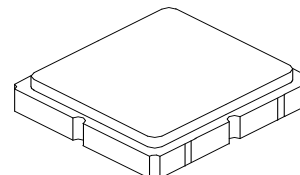


Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	5	dBm
DC Voltage on any Non-ground Terminal	3	V
Operatable Temperature Range	-40 to +90	°C
Storage Temperature Range in Tape and Reel	-40 to +90	°C
Maximum Soldering Profile, 5 cycles/10 seconds maximum	265	°C

SF2133E

**1747.5 MHz
SAW Filter**



SM3030-6

Electrical Characteristics

Characteristic	Sym	Min		Typ	Max		Units
		@25°C	-20 to +70°C		@25°C	-20 to +70°C	
Center Frequency	f_C			1747.5			MHz
Insertion Loss, 1710 to 1785 MHz	IL			2.6	3.3	4.0	dB
Amplitude Ripple, 1710 to 1785 MHz				1.7	2.0	2.5	dB _{P-P}
Attenuation Referenced to 0 dB:							
10 to 1670 MHz		15.6	15	23			dB
1670 to 1690 MHz		17.4	6	24			
1805 to 1880 MHz		18.4	6	24			
1880 to 4500 MHz		15.4	15	25			
4500 to 5000 MHz		13.9	10	14			
Input/Output VSWR, 1710 to 1785 MHz				1.8:1	2.49:1	2.5:1	
Source Impedance	Z_S			50			Ω
Load Impedance	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	679, YWWS						
Standard Reel Quantity	Reel Size 7 Inch	500 Pieces/Reel					
	Reel Size 13 Inch	3000 Pieces/Reel					

Electrical Connections

Connection	Terminals
Input	2
Output	5
Case Ground	All others

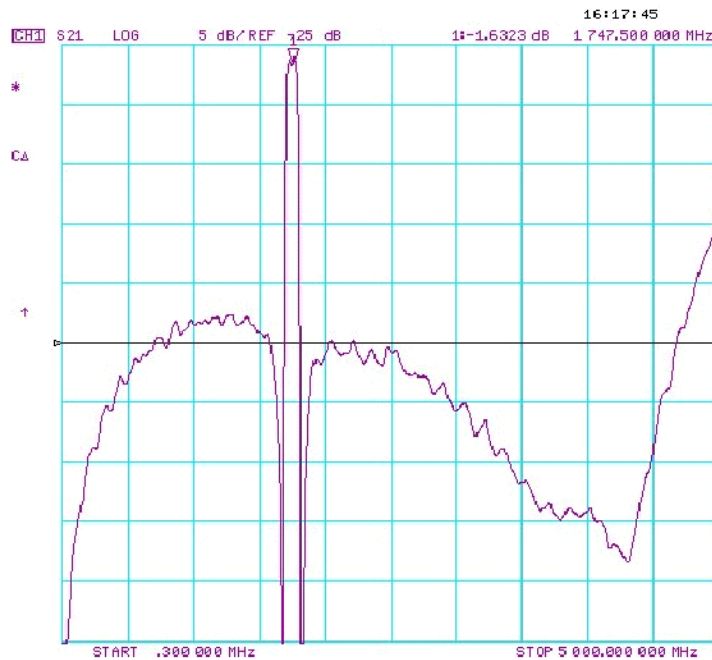
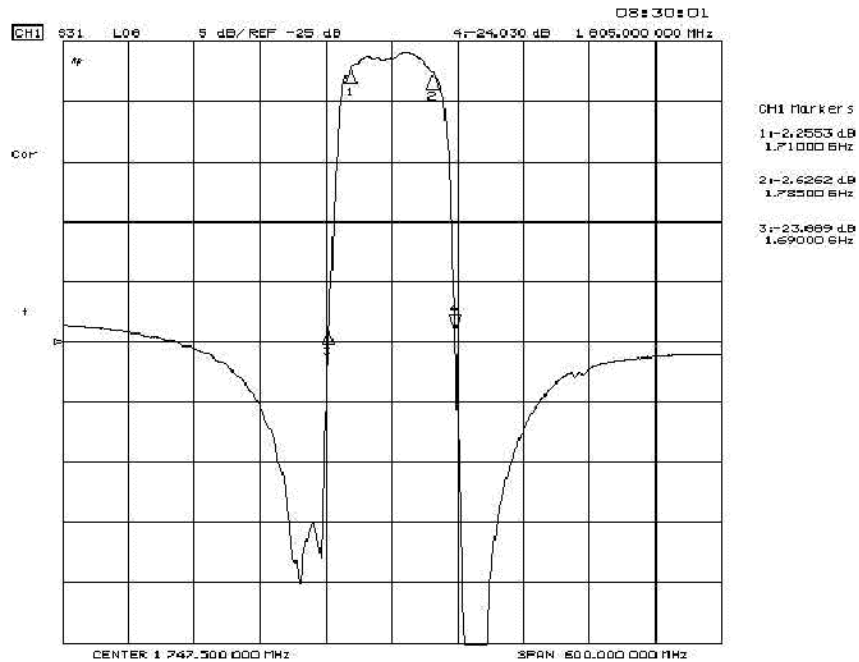


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

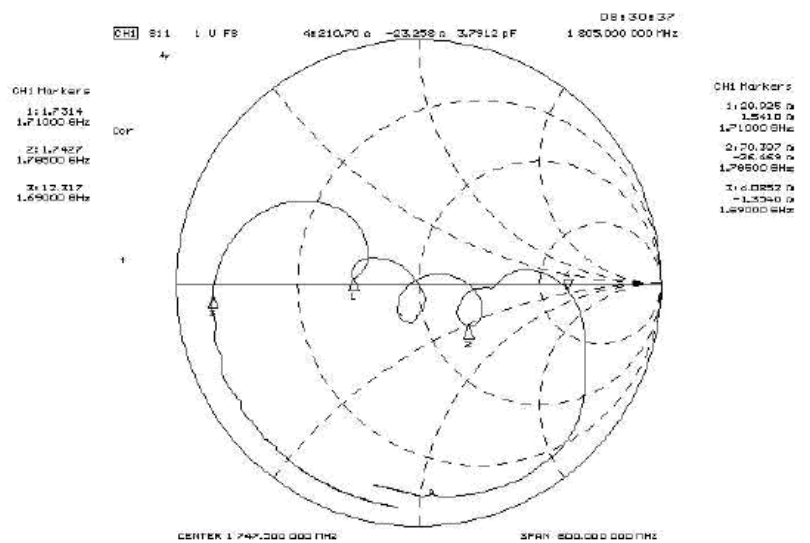
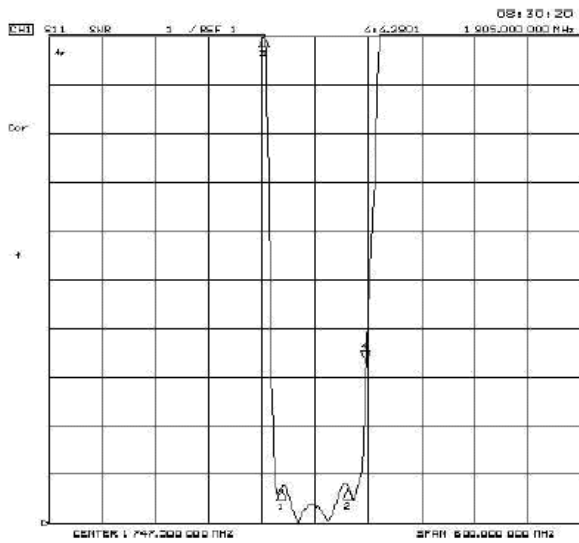
1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, f_C .
3. Rejection is measured as attenuation below the minimum IL point in the passband. Rejection in final user application is dependent on PCB layout and external impedance matching design. See Application Note No. 42 for details.
4. "LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."
5. The design, manufacturing process, and specifications of this filter are subject to change.
6. Either Port 1 or Port 2 may be used for either input or output in the design. However, impedances and impedance matching may vary between Port 1 and Port 2, so that the filter must always be installed in one direction per the circuit design.
7. US and international patents may apply.
8. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

F. Frequency Characteristics :
Transfer function

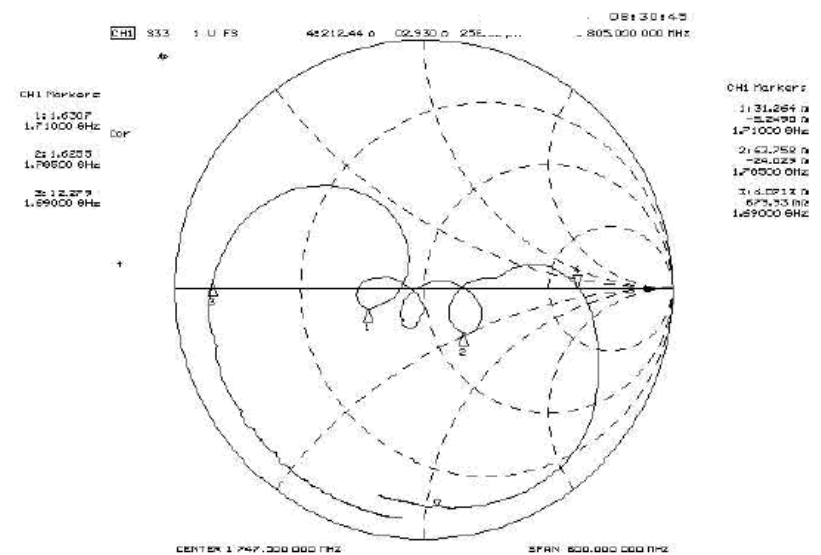
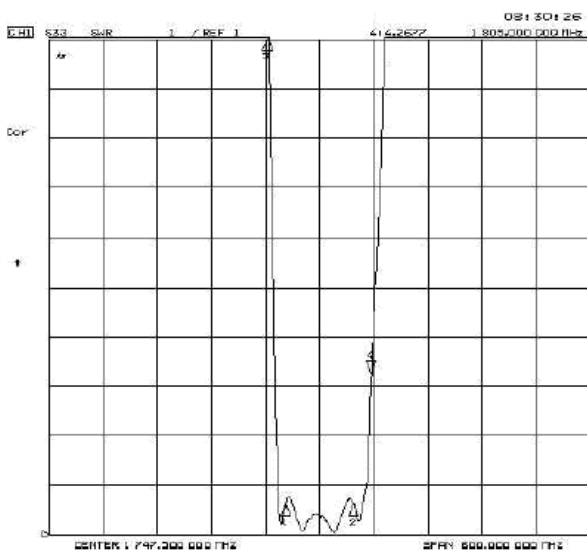


Reflections Functions :

S11



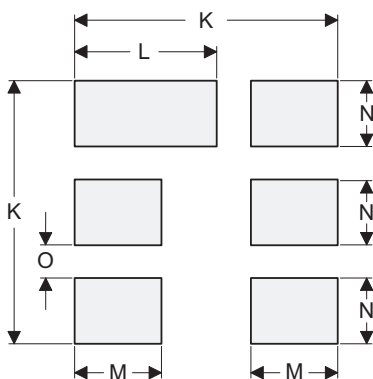
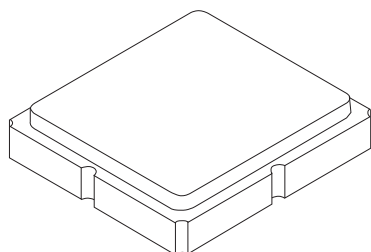
S22



SM3030-6 Case

6-Terminal Ceramic Surface-Mount Case

3.0 X 3.0 mm Nominal Footprint



PCB Footprint Top View

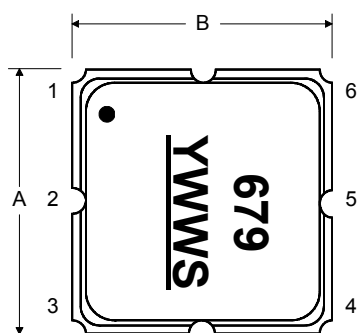
Case and PCB Footprint Dimensions

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	1.12	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	

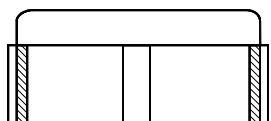
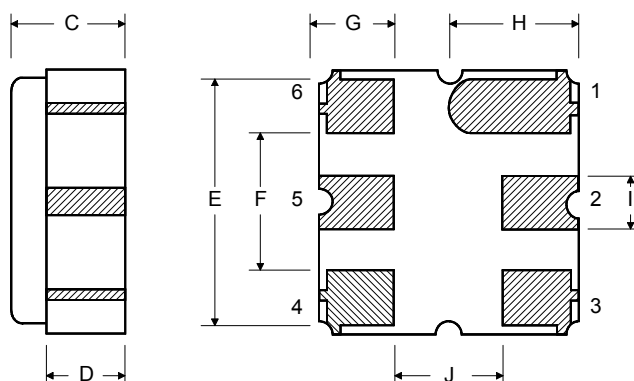
Case Materials

Materials	
Solder Pad Plating	0.3 to 1.0 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
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 of the central hole.

Top View: A large circle with a smaller concentric circle in the center. Dashed lines indicate the center and the hole's diameter. A leader line points from the text "See Detail 'A'" to the central hole.

Side View: A vertical cross-section showing the component's thickness. The total thickness is dimensioned as 12.0. The central hole is dimensioned with a diameter of 100 REF. and a depth of "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 flange with a thickness of 2.0. The flange has a radius of 13.0. The detail view also shows the hole's depth as 2.0.

“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

