Preliminary



SF2171E

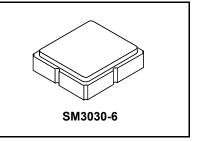
- RF SAW Filter, 719 MHz, 5 MHz Bandwidth
- 3.0 x 3.0 x 1.4 mm Surface-mount Case
- Input/Output Impedance 50 Ω /50 Ω
- Complies with Directive 2002/95/EC (RoHS)



Absolute Maximum Ratings

Rating	Value	Units
Incident Power in Passband	+10	dBm
DC Voltage on any Non-ground Terminal	3	VDC
Operating Temperature Range	-30 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Maximum Soldering Profile, 5 cycles/ 10 seconds maximum	265	°C

719 MHz SAW Filter



Electrical Characteristics

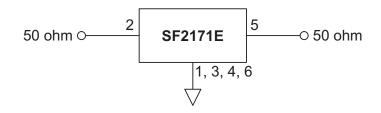
Characteristic	Sym	Notes	Min	Тур	Max	Units
Center Frequency	f _C			719		MHz
Max. Insertion Loss, 716.5 - 721.5 MHz	IL			2.1	3.0	
Amplitude Ripple, p-p, 716.5 - 721.5 MHz				0.4	2.0	dB
Return Loss, 716.5 - 721.5 MHz			10	15		
Group Delay Ripple, 716.5 - 721.5 MHz				25	80	ns
Attenuation (Reference level from 0 dB)						
0 - 690 MHz			40	54		
690 - 704 MHz			35	41		
734 - 750 MHz			27	37		dB
750 - 824 MHz			37	53		
824 - 960 MHz			45	52		
960 - 2500 MHz			20	35		
Temperature Coefficient of Frequency			-36			ppm/C
Terminating Source impedance	Z _S			50		Ω
Terminating Load impedance	Z_{L}			50		Ω

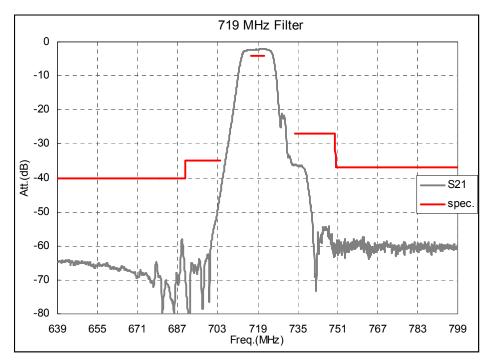
Single Ended Input / Output, Impedance match	No matching network required for operation at 50 ohms
Case Style	SM3030-6
Lid Symbolization	853

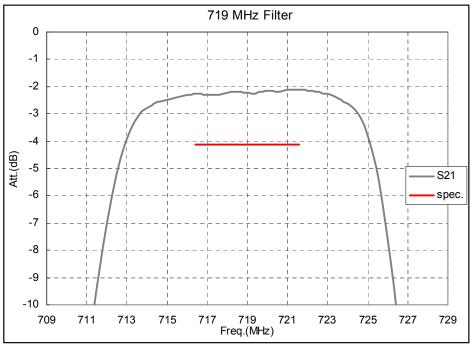
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling. Notes:

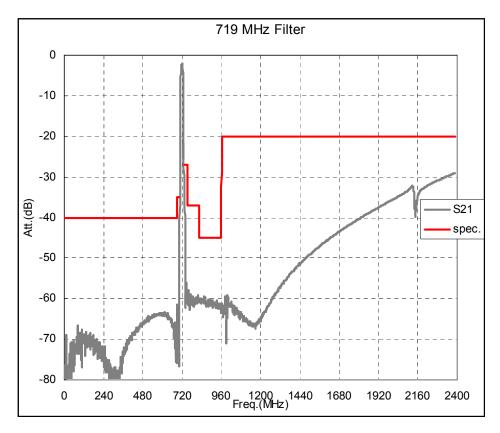
- 1. US and international patents may apply.
- Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

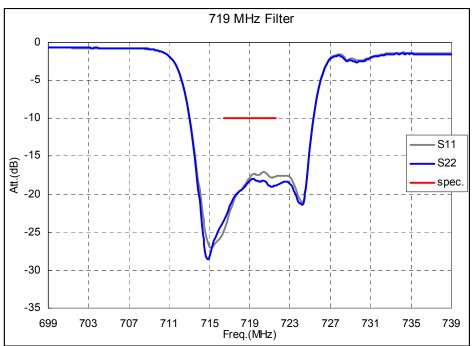
Matching Circuit





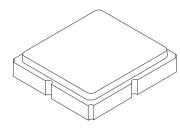


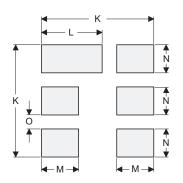




6-Terminal Ceramic Surface-Mount Case 3.0 X 3.0 mm Nominal Footprint







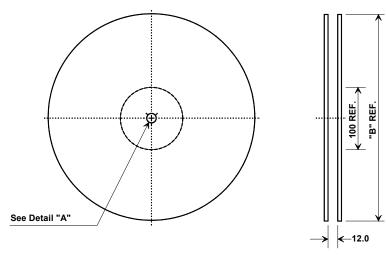
PCB Footprint Top View

Dimension	mm			Inches		
Dimension	Min	Nom	Max	Min	Nom	Max
Α	2.87	3.00	3.13	0.113	0.118	0.123
В	2.87	3.00	3.13	0.113	0.118	0.123
С	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
Н	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	
М		1.05			0.041	
N		0.81			0.032	
0		0.38			0.015	

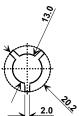
Case Materials

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 ₂ O ₃ Ceramic			
Pb Free				

Tape and Reel Specifications



1	"B"	Quantity Per Reel
Inches	millimeters	Quality For Roof
7	178	500
13	330	3000



COMPONENT ORIENTATION and DIMENSIONS

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

