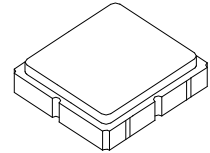


RFM products are now
Murata products.

SF2366E

1575.42/2332.5 MHz SAW Filter



SM3030-8

- **Low loss Diplexer for GPS and SDARS Applications**
- **3.0 x 3.0 x 1.3 mm Surface-Mount Case**
- **No Matching Network Required for Operation at 50Ω**
- **RoHS Compatible**

Absolute Maximum Ratings

Rating	Value	Units
Source Power	10	dBm
DC voltage	6	VDC
Storage Temperature Range	-40 to +95	°C
Operating Temperature Range	-40 to +95	°C

Characteristics - GPS Output	Sym	Notes	Min	Typ @25°C	Max	Units
Center Frequency	f_c			1575.42		MHz
Insertion Loss 1574 to 1577 MHz				2.8	3.2	dB
Amplitude Ripple 1574 to 1577 MHz				0.1	1.2	dB
Attenuation - referenced from 0dB						dB
10.00 to 1500.00 MHz			30	36		
1500.00 to 1525 MHz			20	33		
1610.00 to 1625.00 MHz			20	50		
1625 to 2000.00 MHz			35	39		
2000.00 to 3000.00 MHz			22	29		
VSWR 1574 to 1577 MHz				1.7	2.2	
Single Ended Input / Output, Impedance match	No matching network required for operation at 50 ohms					
Case Style	SM3030-8 3 x 3 mm Nominal Footprint					
Lid Symbolization (YY=year, WW=week, S=shift)	5P YWWS					

Characteristics - SDARS Output	Sym	Notes	Min	Typ @25°C	Max	Units
Center Frequency	f_c			2332.5		MHz
Insertion Loss 2320.00 to 2345 MHz				3.1	3.5	dB
Amplitude Ripple 2320.00 to 2345 MHz				0.4	1.4	dB
Attenuation - referenced from 0dB						dB
10 to 2100 MHz			20	28		
2100 to 2200 MHz			15	27		
2432 to 3000 MHz			22	29		
VSWR 2320 to 2345 MHz				2.2	2.6	
Isolation between GPS and SDARS path	1574 to 1577 MHz		25	33		dB
	2320 to 2345 MHz		25	29		



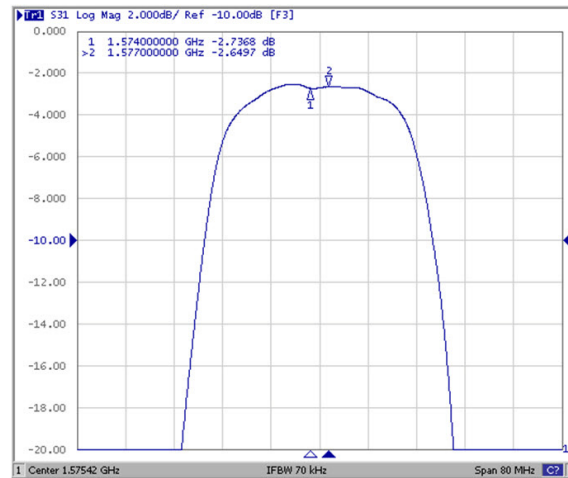
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

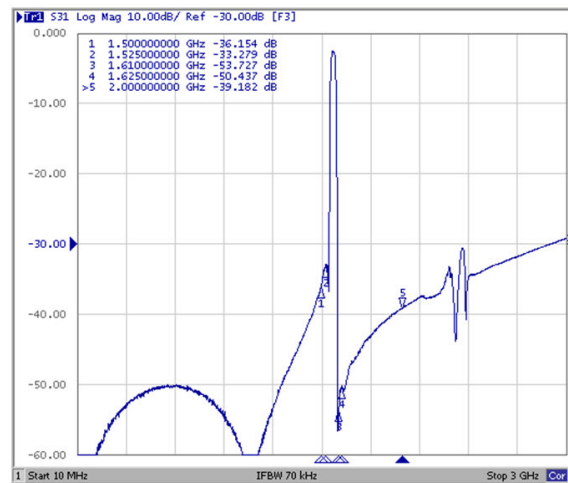
1. US and international patents may apply.
2. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

Frequency Characteristics 1575.42 MHz Filter

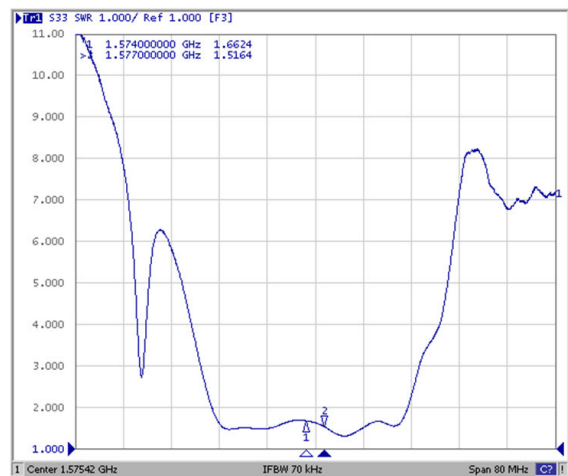
GPS Characteristics



GPS Characteristics - Wideband

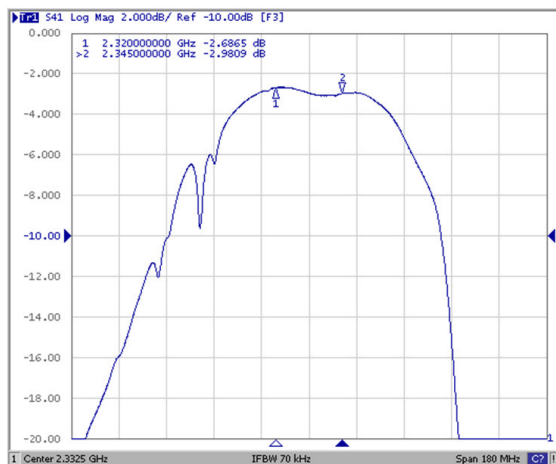


GPS Characteristics - VSWR

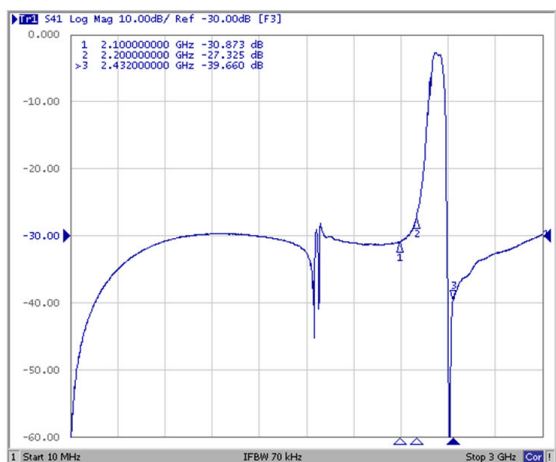


Frequency Characteristics 2332.5 MHz Filter

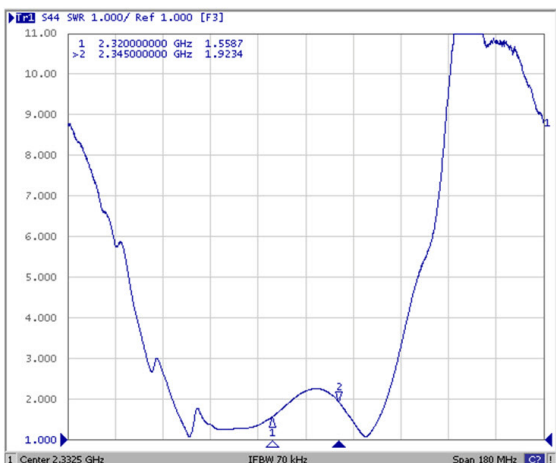
SDARS Characteristics



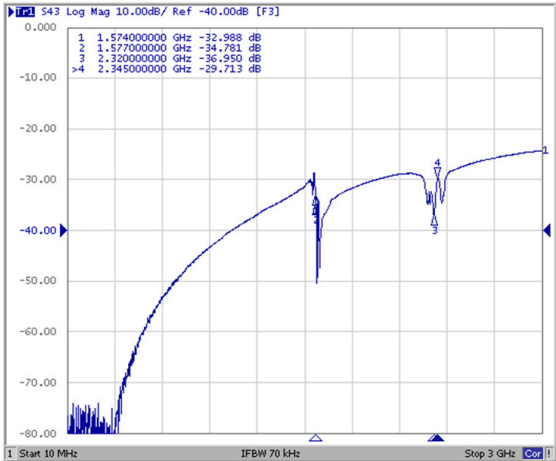
SDARS - Wideband



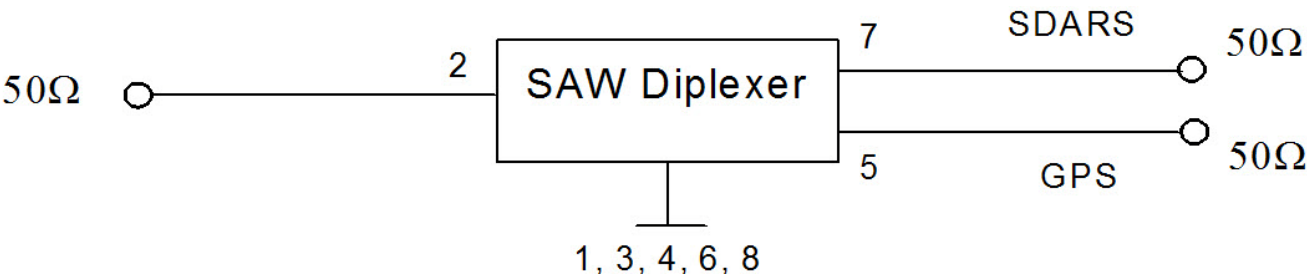
SDARS - VSWR



Isolation Characteristic



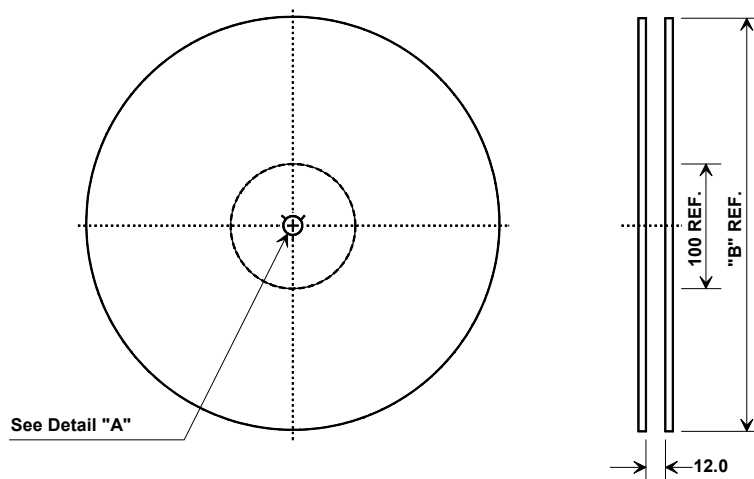
Measurement Circuit



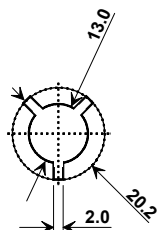
Electrical Connections

Connection	Terminals
Input	2
GPS Output	5
SDARS Output	7
Ground	1, 3, 4, 6, 8

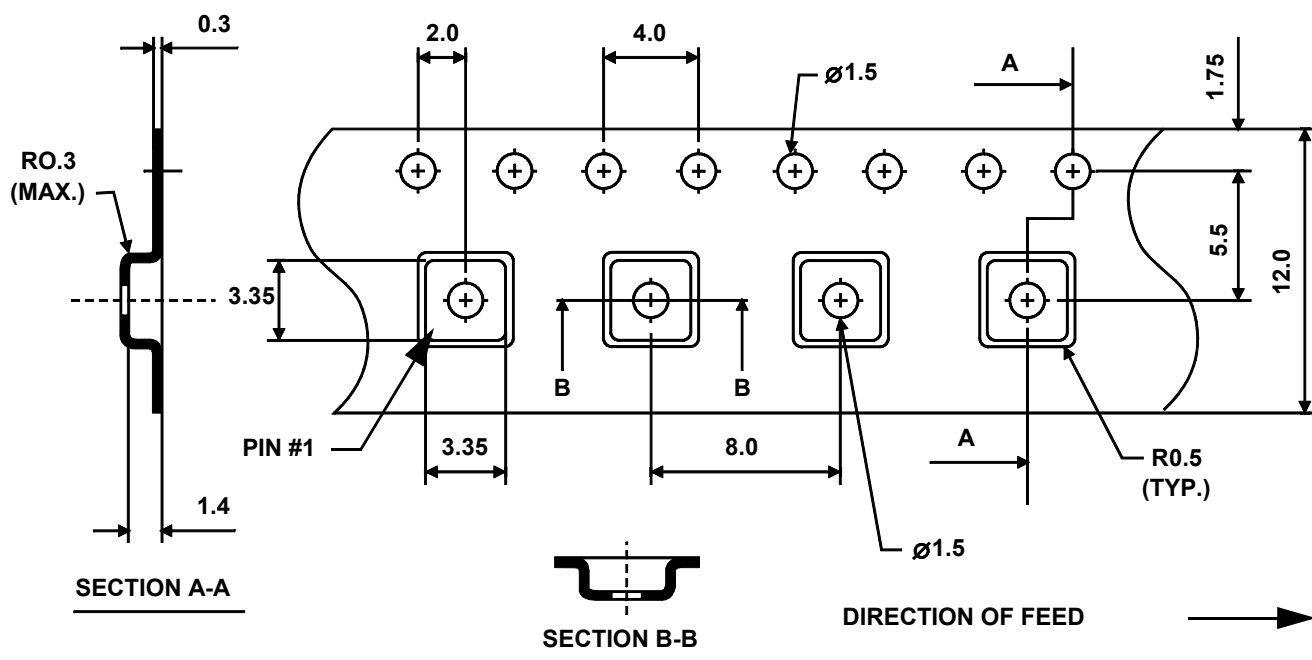
Tape and Reel Specifications



"B" "Nominal Size"		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	2000



COMPONENT ORIENTATION

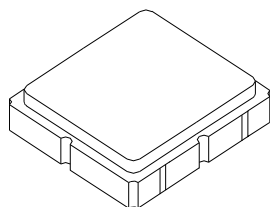


SM3030-6 Case

6-Terminal Ceramic Surface-Mount Case

3.0 X 3.0 mm Nominal Footprint

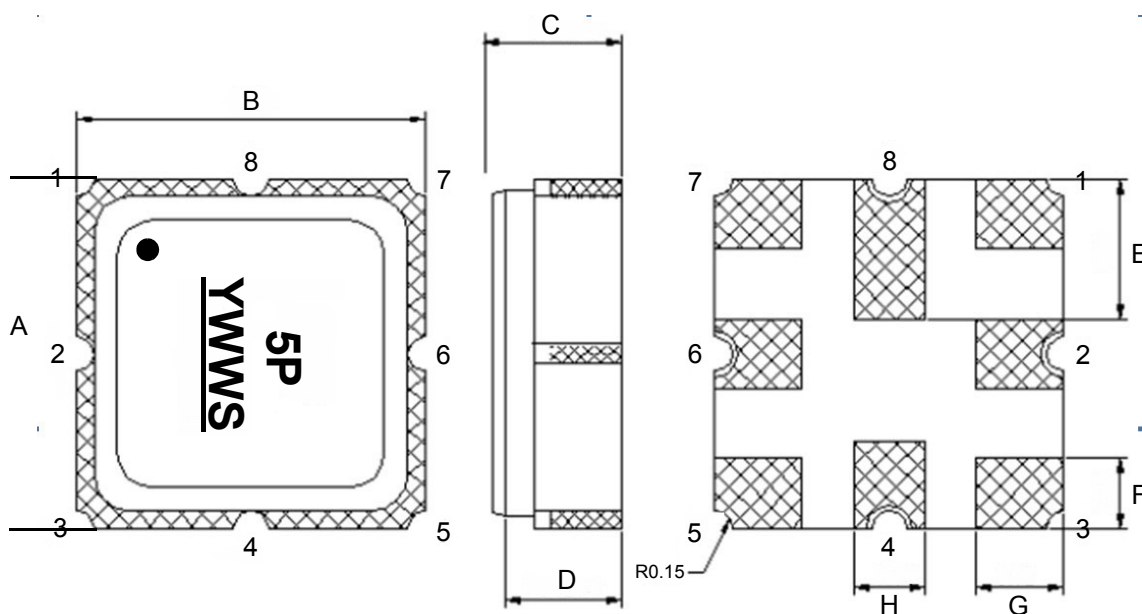
Case Dimensions



Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	-	3.0	-	-	0.118	-
B	-	3.0	-	-	0.118	-
C	-	1.30	-	-	0.051	-
D	-	1.00	-	-	0.039	-
E	-	1.20	-	-	0.047	-
F	-	0.60	-	-	0.023	-
G	-	0.75	-	-	0.029	-
H	-	0.60	-	-	0.023	-

TOP VIEW

BOTTOM VIEW



PCB Footprint

