

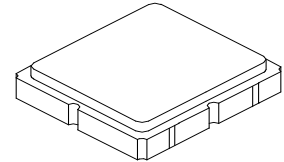
- **RF Filter for Mobile Communication Applications**
- **No Matching Circuit Required**
- **3.0 x 3.0 x 1.3 mm Package**
- **Complies with Directive 2011/65/EU (RoHS)**
- **Moisture Sensitivity Level: 1**

Absolute Maximum Ratings

Rating	Value	Units
Maximum Input Power	+10	dBm
DC voltage between Terminals	0	VDC
Operable Temperature Range	-45 to +125	°C
Storage Temperature	-40 to +85	°C
Suitable for lead-free soldering - Max Soldering Temperature	260°C for 30 s	

SF1192B

**1842.5 MHz
SAW Filter**



SM3030-6

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Operating Frequency	f_c			1842.5		MHz
Passband	Insertion Loss across $f_c \pm 37.5$ MHz	IL		2.2	3.8	dB
	Amplitude Ripple p-p across $f_c \pm 37.5$ MHz			1.3	2.3	dB
Attenuation	1542.5 ~ 1600 MHz		20.0	24.5		dB
	1600 ~ 1710 MHz		22.0	25.0		dB
	1710 ~ 1785 MHz		10.0	23.5		dB
	1920 ~ 2142.5 MHz		25.0	28.0		dB
VSWR across $f_c \pm 37.5$ MHz				1.9	2.6	
Source impedance	Z_s			50		Ω
Load impedance	Z_L			50		Ω
Specification Temperature Range	T_A		-30		+85	°C

Case Style	SM3030-6 3 x 3 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=Shift)	454 YWWS
Standard Reel Quantity	500 Pieces Per Reel
Reel Size 7 Inch	
Reel Size 13 Inch	3000 Pieces Per Reel

Electrical Connections

Connection	Terminals
Input	2
Output	5
Ground	All others

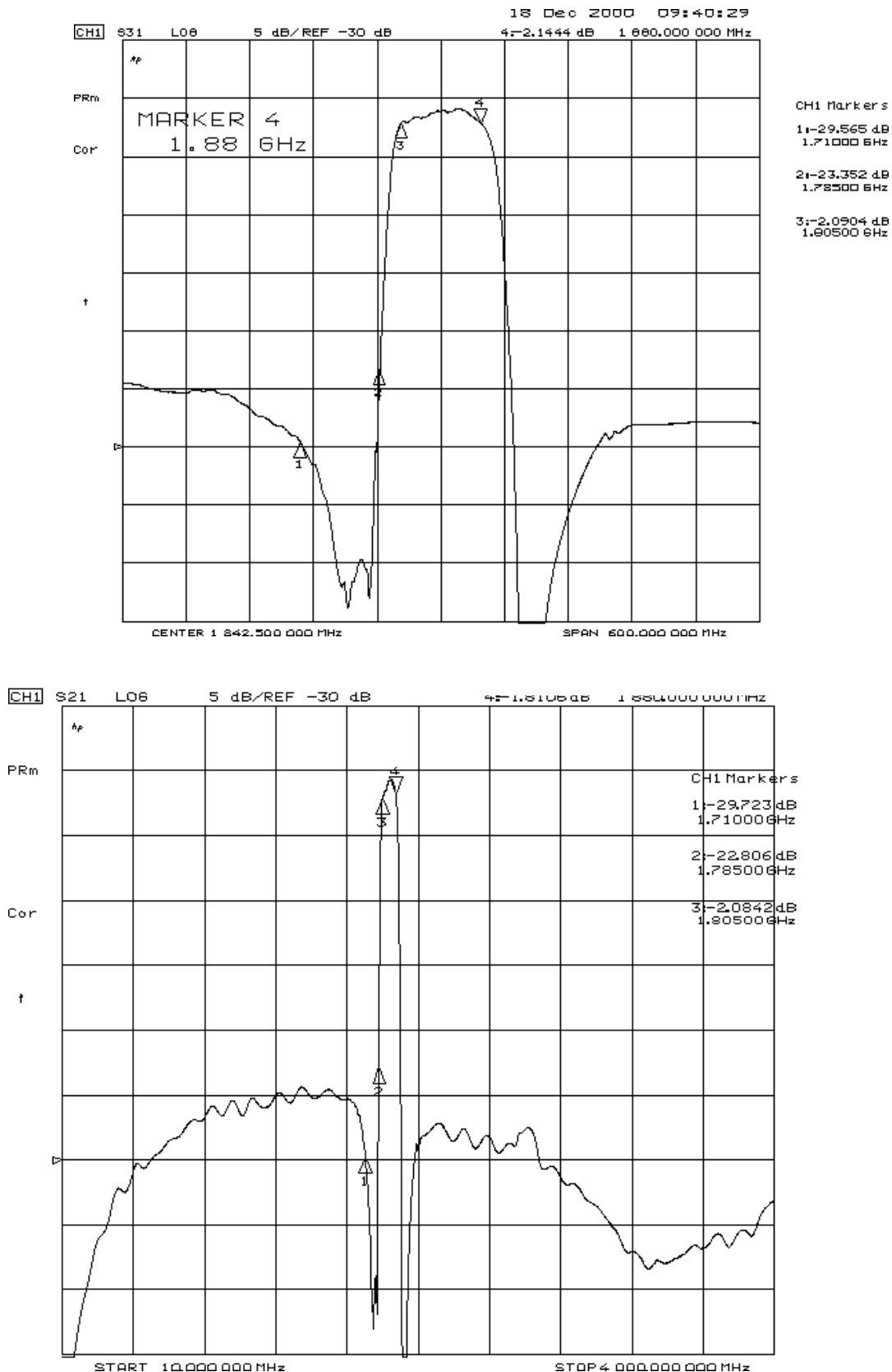


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

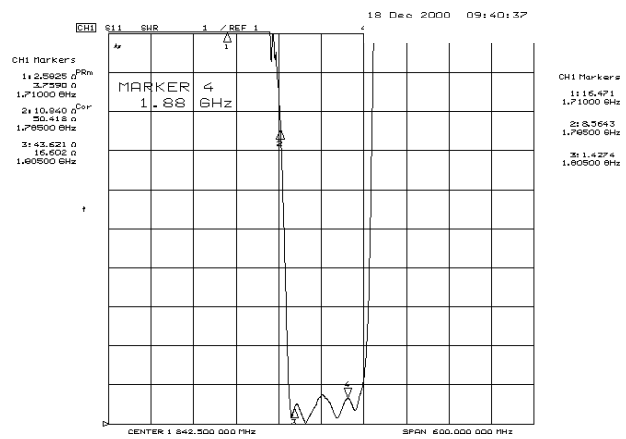
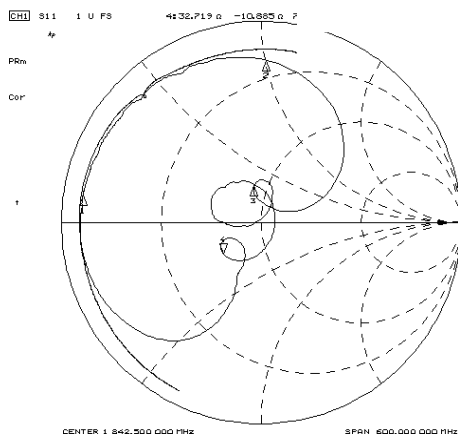
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics: Transfer Function

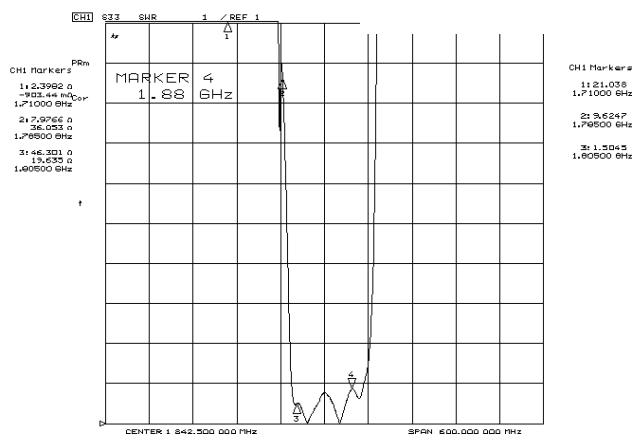
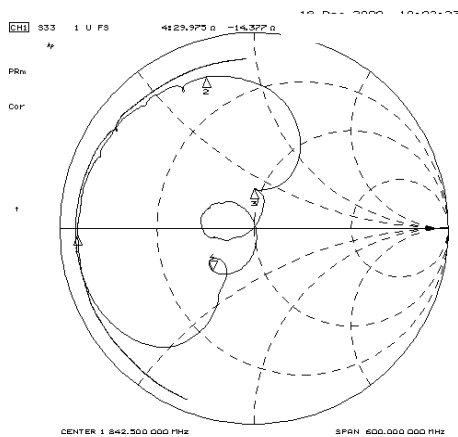


Reflections Functions:

S11 VSWR

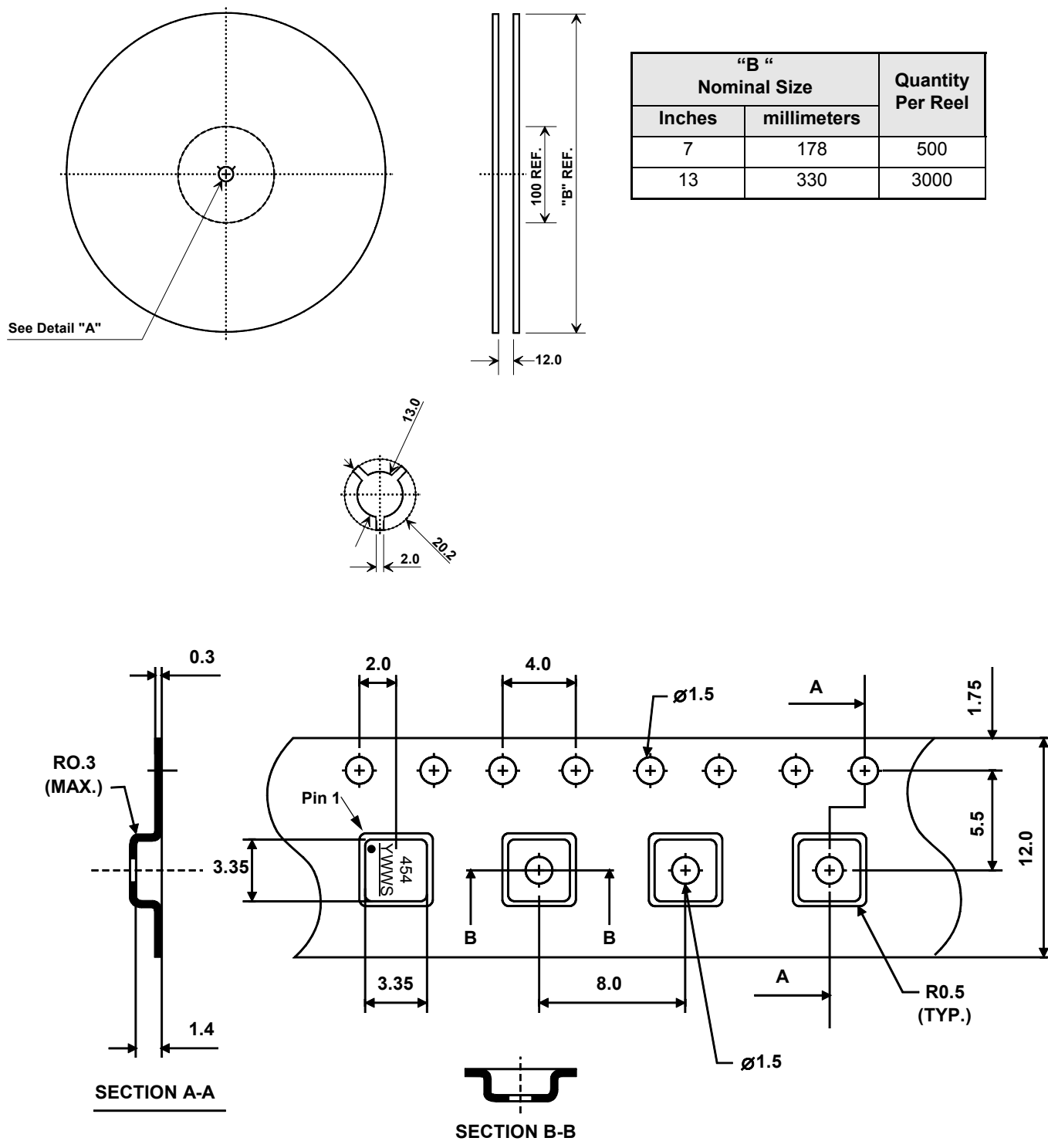


S22 VSWR



Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481



SM3030-6 Case

6-Terminal Ceramic Surface-Mount Case

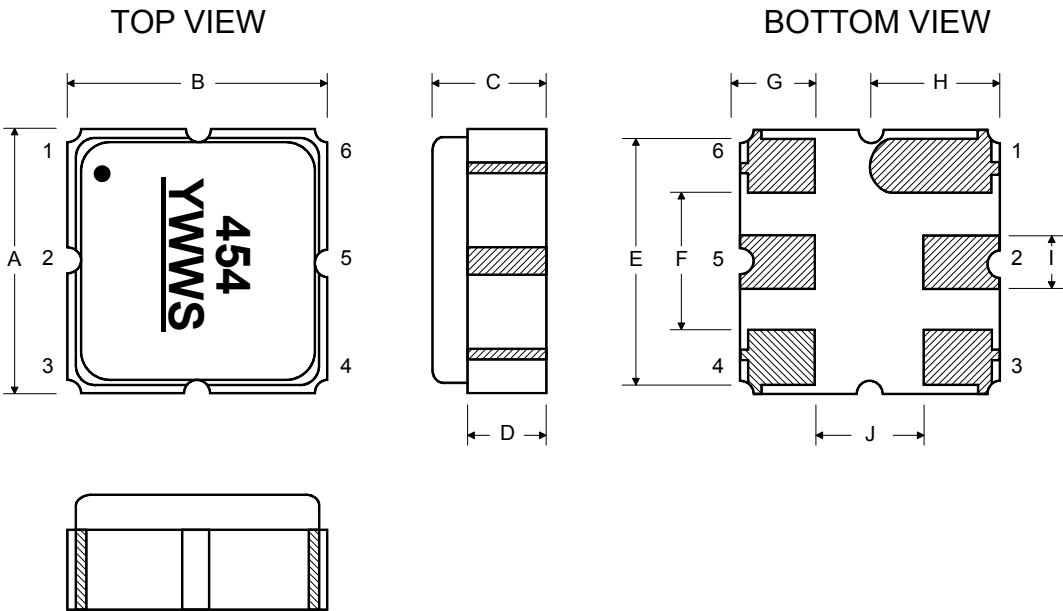
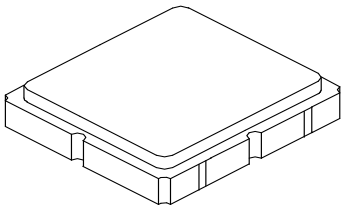
3.0 X 3.0 mm Nominal Footprint

Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	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

Electrical Connections

Connection		Terminals
Port 1	Single Ended Input	2
Port 2	Single Ended Output	5
	Ground	All others
Single Ended Operation Only		
Dot indicates Pin 1		



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 (10 seconds).
4. Time: 5 times maximum.

