

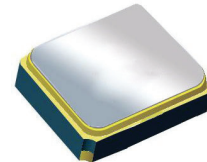
Surface Mount 2185.00MHz SAW Filter

AFS14A30-2185.00-T3

Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive - MSL = N/A: Not Applicable



RoHS
Compliant



1.4 x 1.1 x 0.7 mm

FEATURES:

- 1.4 x 1.1 x 0.7 mm low profile SMT package
- Low Insertion loss
- Excellent selectivity with high out-of-band rejection

APPLICATIONS:

- Wireless Communication
- Remote Control
- Cellular Phones

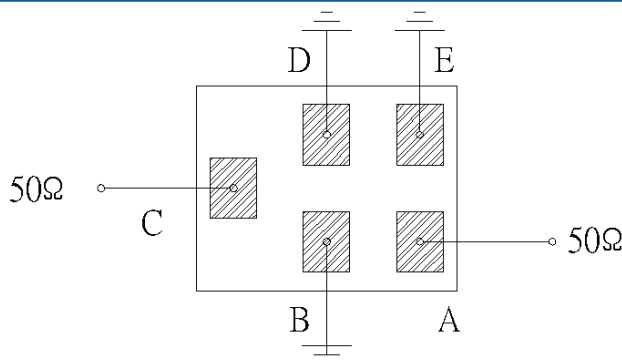
ELECTRICAL SPECIFICATIONS:

Maximum Ratings

Item	Value
Input Power Level	+10 dBm max.
DC Permissive Voltage	3.0V DC max.
Operating Temperature Range	-30°C to + 105°C
Storage Temperature Range	-40°C to + 105°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency (f_c)		2185		MHz	
Insertion Loss (IL)		2.0	3.50	dB	(2170.00~2200.00MHz)
Effective Bandwidth		30.00		MHz	
Amplitude Ripple		0.50	2.30	dB	(2170.00~2200.00MHz)
Worst-Case Input / Output Return Loss		12.73	10.88	dB	(2170.00~2200.00MHz)
Stop-band Attenuation (Referenced to 0.0 dB)	29	30.5		dB	DC~1980 MHz
	32	39.4			1980~2010 MHz
	20	32			2010~2110 MHz
	20	27			2260~2300 MHz
	29	34			2300~3500 MHz
	20	23			3500~6000 MHz
Terminating Source Impedance (Z_S)		50		Ω	
Temperature Coefficient of Frequency		-36		ppm/°C	

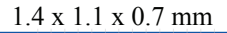
TEST CIRCUIT:



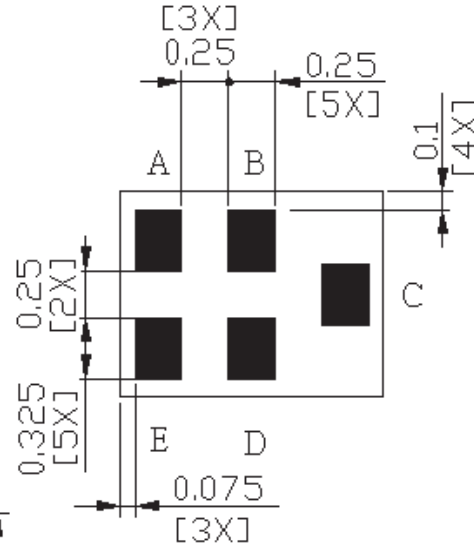
Bottom View



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top view



C:	Input
A:	Output
B, D, E:	Ground

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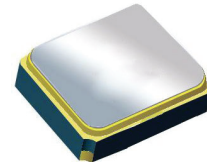
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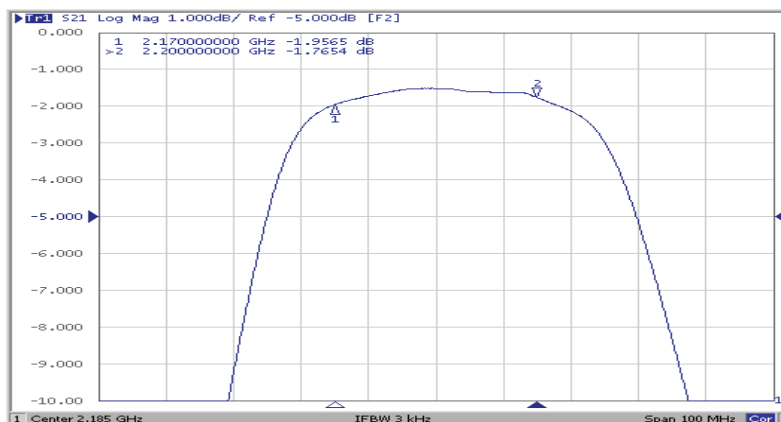
RoHS
Compliant



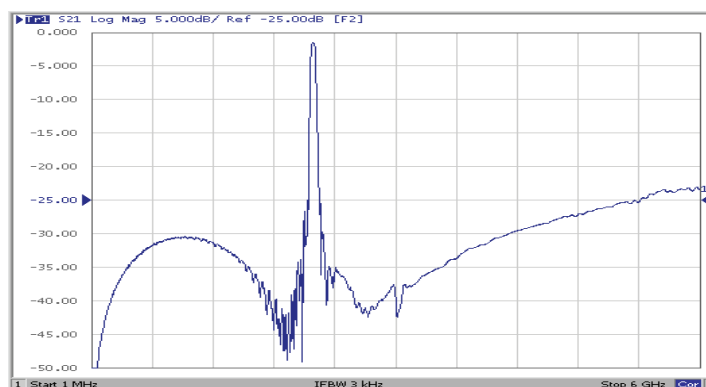
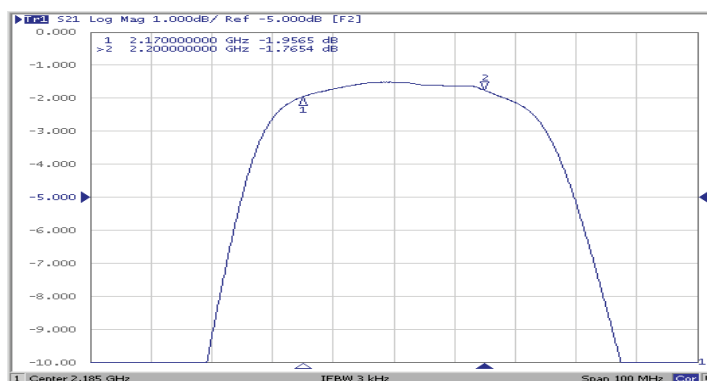
1.4 x 1.1 x 0.7 mm

FREQUENCY CHARACTERISTICS:

Filter Frequency Response (Narrowband)

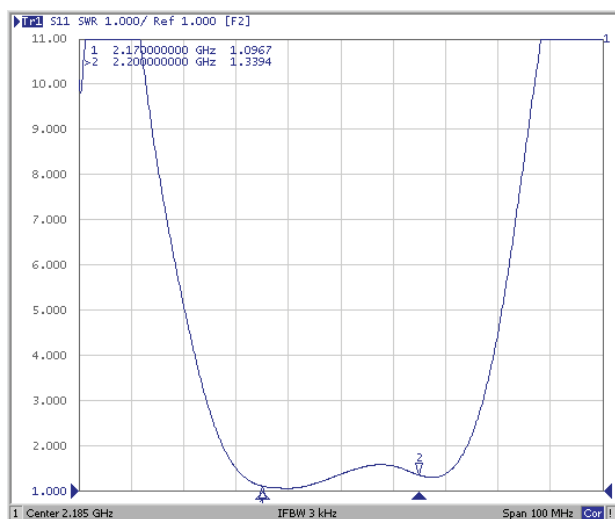


Filter Frequency Response (Wideband)

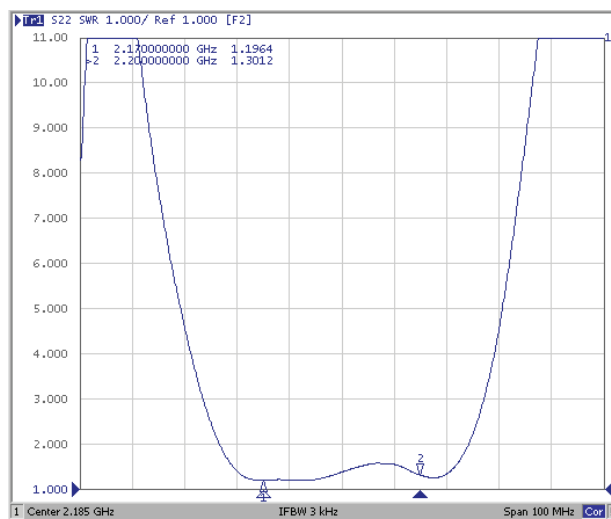


REFLECTION FUNCTIONS:

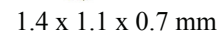
S11



S22



AFS14A30-2185.00-T3

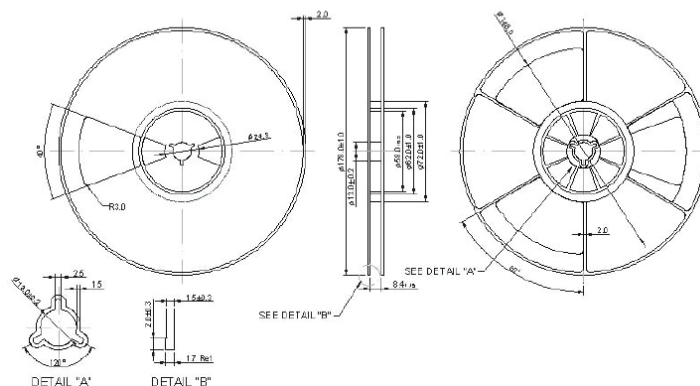


RoHS
Compliant

Time (Sec)	Temp (Deg C)
0	25
20	25
40	145
60	150
80	155
100	160
120	170
140	175
160	190
180	210
200	250
220	260
240	240
260	170
280	145
300	145
320	130
340	115
360	110

Technical drawing of a mechanical part with dimensions and tolerances:

- Top view dimensions:
 - Overall width: 0.2 ± 0.05
 - Distance between first two holes: 4.0 ± 0.1
 - Distance between second and third holes: 2.0 ± 0.05
 - Hole diameter: $\phi 1.55 \pm 0.05$
 - Distance from right edge to center of last hole: 1.75 ± 0.1
 - Distance from center of last hole to right edge: 3.5 ± 0.05
 - Overall height: 8.0 ± 0.3
- Side view dimensions:
 - Overall height: 1.73 ± 0.1
 - Distance between first two holes: 4.0 ± 0.1
 - Distance from center of last hole to right edge: 1.75 ± 0.1
 - Overall width: 0.75 ± 0.1
 - Distance from center of last hole to right edge: 1.47 ± 0.1



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