

Surface Mount 1227.60MHz SAW Filter

AFS20A20-1227.60-T3

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



RoHS/RoHS II compliant



2.0 x 1.6 x 0.75 mm

FEATURES:

- 2.0 x 1.6 x 0.75 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:

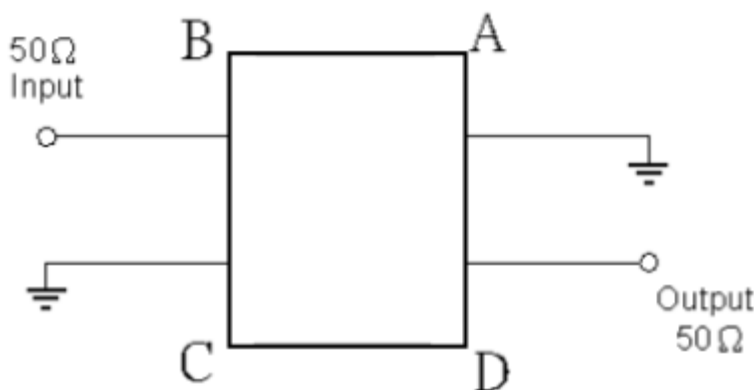
Maximum Ratings

Item	Value
Input Power Level	+20 dBm max.
DC Permissive Voltage	3V DC max.
Operating Temperature Range	-55°C to + 105°C
Storage Temperature Range	-55°C to + 105°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency (f_c)		1227.60		MHz	
Insertion Loss (IL)		2.60	3.00	dB	
3dB Bandwidth	20	42		MHz	
Amplitude Ripple		0.80	2.00	dB	1217.60 ~ 1237.6MHz
Group Delay		12	26	ns	1217.60 ~ 1237.6MHz
Group Delay Ripple		23	70	ns	1217.60 ~ 1237.6MHz
Worst-Case Input / Output Return Loss	8.0	10.5		dB	1217.60 ~ 1237.6MHz
Stop-band Attenuation (Referenced to 0.0 dB)	15	20		dB	300MHz ~ 1152MHz
	15	20			1302MHz ~ 1900MHz
	15	21			1900MHz ~ 3000MHz
Source Impedance (Z_S)		50		Ω	See note # 1
Load Impedance (Z_L)		50		Ω	See note # 1

Note #1: No matching network required for operation into 50 Ω 's

TEST CIRCUIT:



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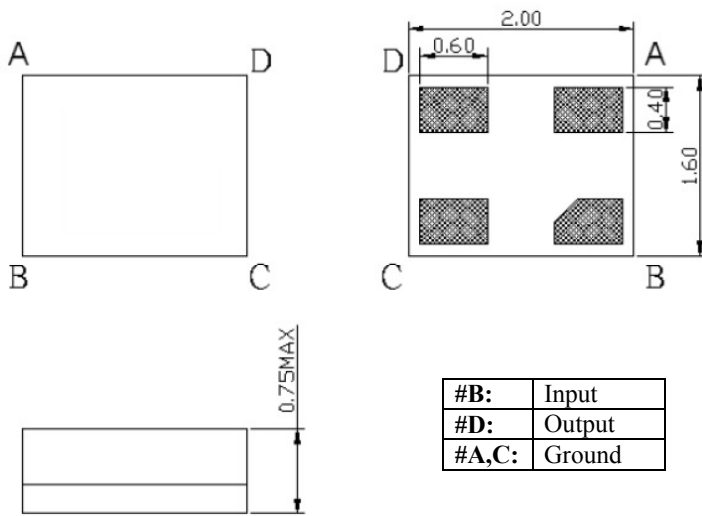


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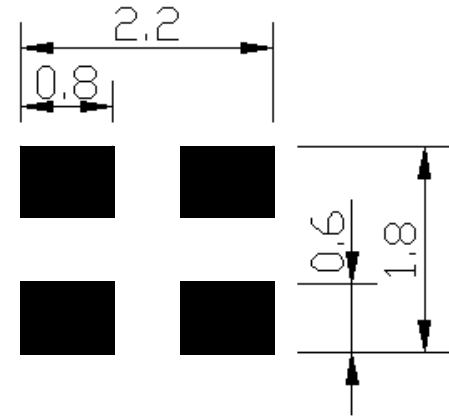


2.0 x 1.6 x 0.75 mm

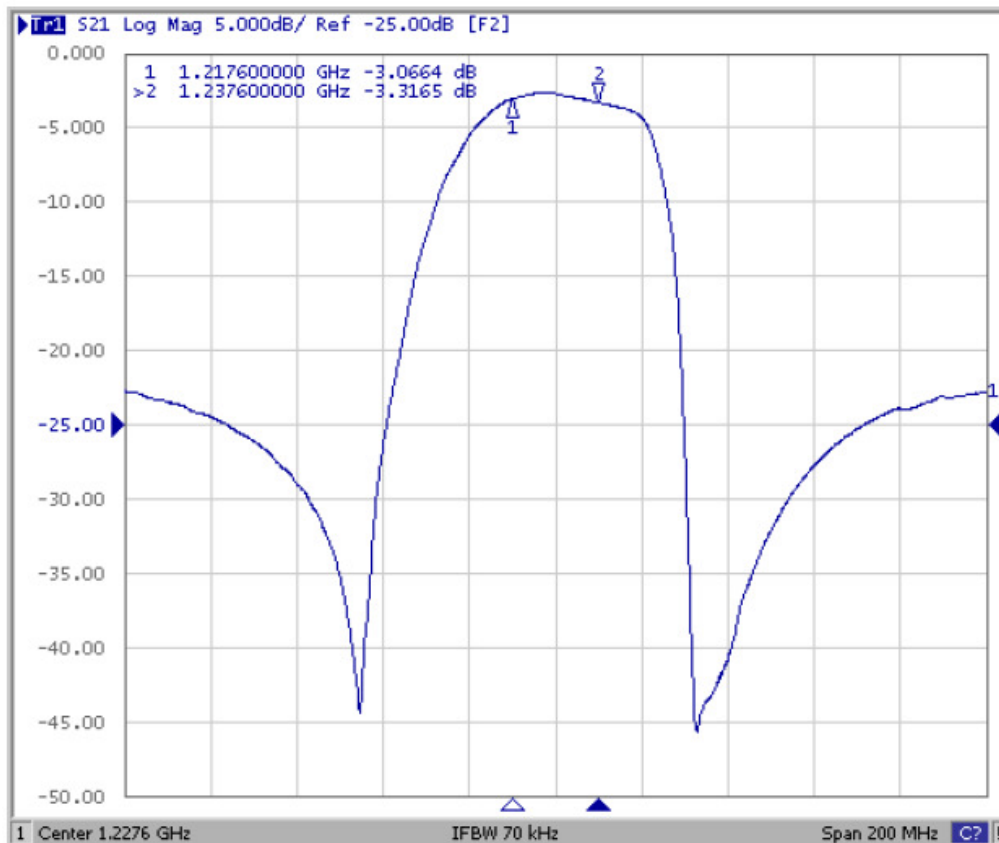
OUTLINE DIMENSION:



Recommended Land Pattern:



FILTER FREQUENCY RESPONSE (NARROWBAND)



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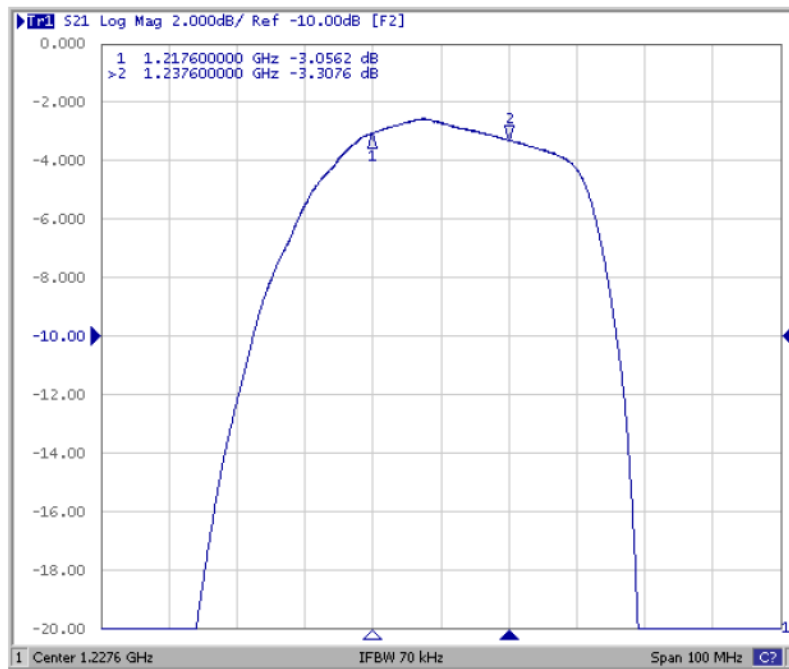


RoHS/RoHS II compliant

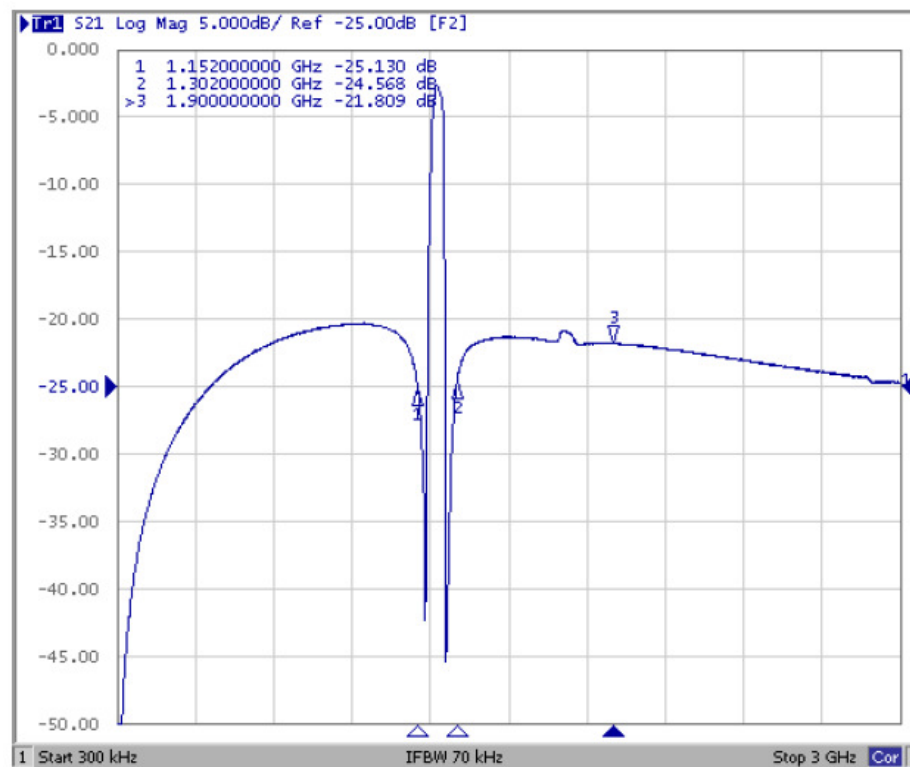


2.0 x 1.6 x 0.75 mm

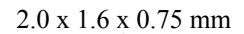
FILTER FREQUENCY RESPONSE (WITH-IN-PASSBAND)



FILTER FREQUENCY RESPONSE (WIDEBAND)



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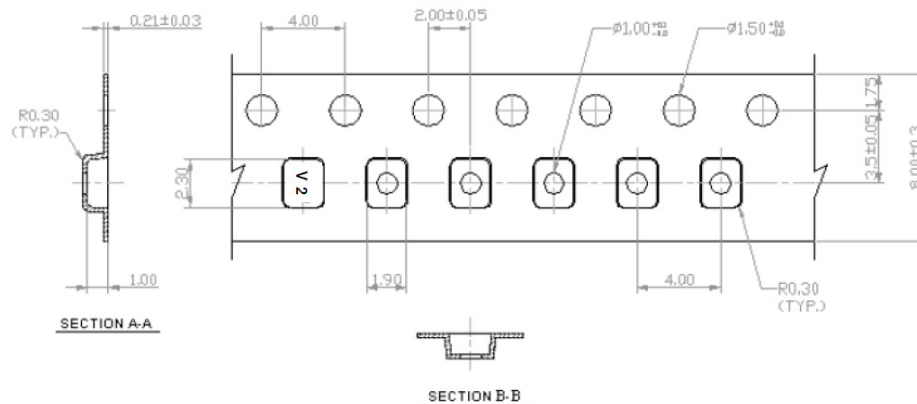
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Pb Free IR Reflow Profile

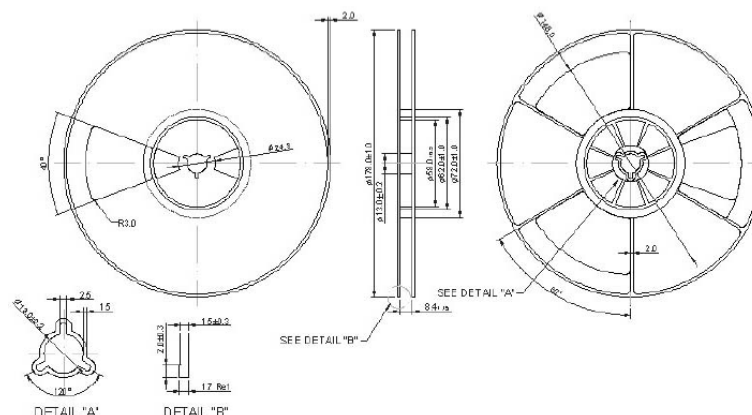
The graph shows a temperature profile for lead-free IR reflow. The y-axis represents Temperature in degrees Celsius (Temp/degC) from 20 to 300. The x-axis represents Time in seconds (Time / sec) from 0 to 360.

Key features of the profile:

- Preheating:** Indicated by a horizontal double-headed arrow from approximately 60 to 90 seconds, with a temperature range of 150°C ~ 180°C.
- Heating:** Indicated by a horizontal double-headed arrow from approximately 180 to 225 seconds, with a temperature of 225°C.
- Peak:** The maximum temperature is labeled as "Peak (260°C max.)" occurring at approximately 225 seconds.
- Cooling:** Indicated by a horizontal double-headed arrow from approximately 260 to 300 seconds, with the instruction "Go down gradually".

Packaging: 3,000 Units Per Reel

Reel Dimensions



Dimensions: mm

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