

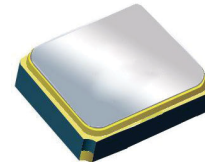
Surface Mount 1575.42MHz SAW Filter

AFS20A02-1575.42-T3

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



RoHS
Compliant



2.0 x 1.6 x 0.9 mm

FEATURES:

- 2.0 * 1.6 * 0.9 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:

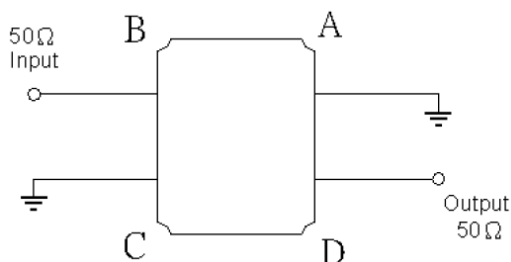
Maximum Ratings

Item	Value
Input Power Level	+10 dBm max.
DC Permissive Voltage	3V DC max.
Operating Temperature Range	-40°C to + 85°C
Storage Temperature Range	-55°C to + 95°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency (f_c)		1575.42		MHz	
Insertion Loss (IL)		1.15	1.60	dB	1574.42 ~ 1576.42MHz
Effective Bandwidth		2		MHz	
Amplitude Ripple		0.1	0.5	dB	1574.42 ~ 1576.42MHz
Worst-Case Input / Output Return Loss		20	10	dB	1574.42 ~ 1576.42MHz
Stop-band Attenuation (Referenced to 0.0 dB)	31	33		dB	100MHz ~ 960MHz
	31	33			960MHz ~ 1460MHz
	22	26			1460MHz ~ 1513MHz
	22	28			1648MHz ~ 1710MHz
	25	32			1710MHz ~ 1990MHz
	25	30			1990MHz ~ 2300MHz
	29	31			2300MHz ~ 4000MHz
	20	24			4000MHz ~ 6000MHz
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:

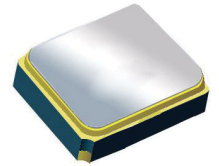


Surface Mount 1575.42MHz SAW Filter

AFS20A02-1575.42-T3

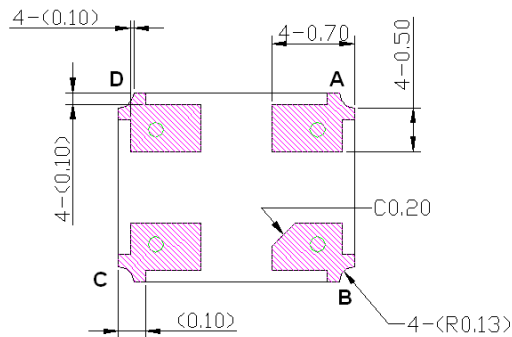
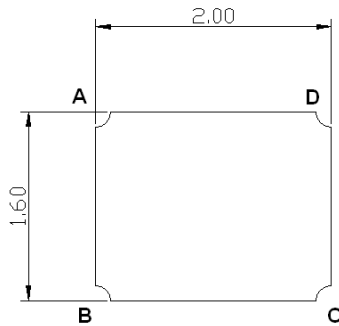


RoHS
Compliant

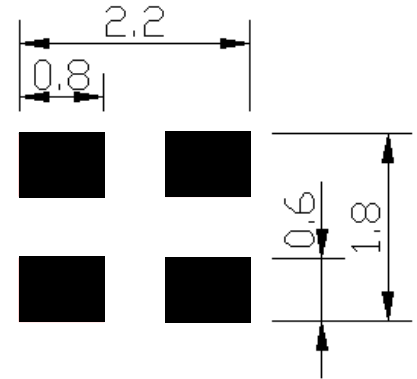


2.0 x 1.6 x 0.9 mm

OUTLINE DIMENSIONS:



Recommended Land Pattern:

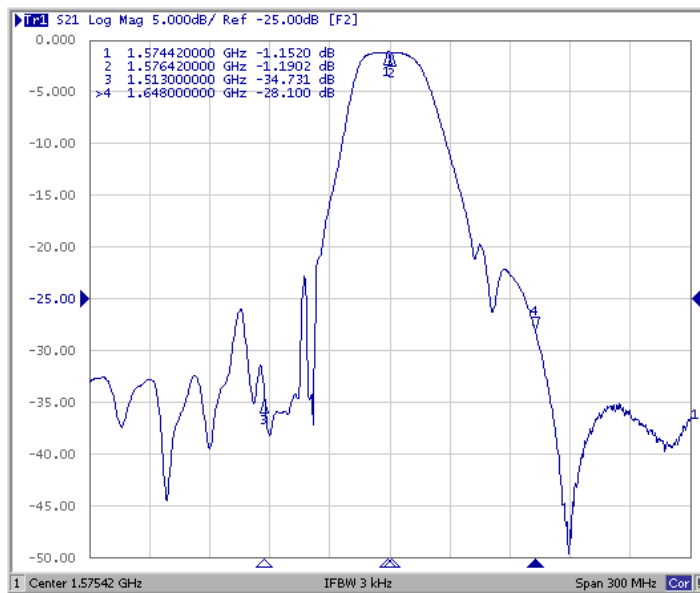


#B:	Input
#D:	Output
#A,C:	Ground
Unit:	mm

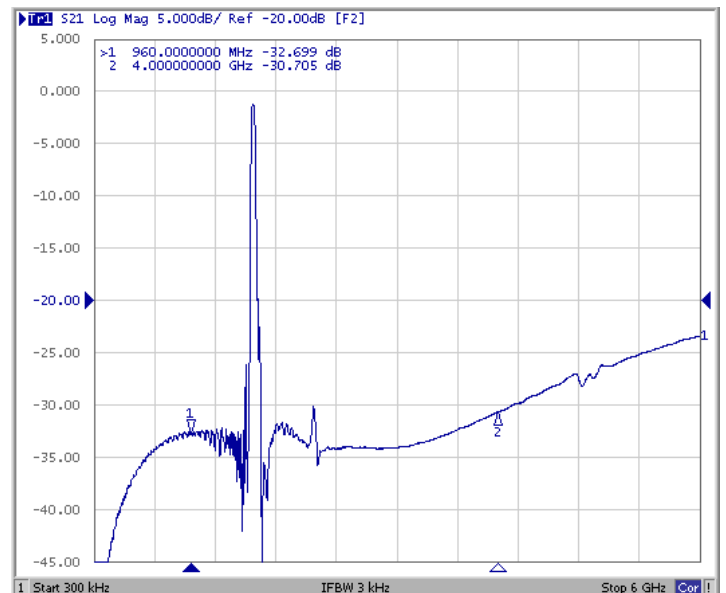
*All Dimensions are in mm

FREQUENCY CHARACTERISTICS:

Filter Frequency Response (Narrowband)



Filter Frequency Response (wideband)

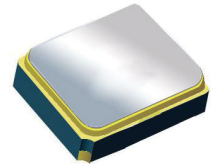


Surface Mount 1575.42MHz SAW Filter

AFS20A02-1575.42-T3



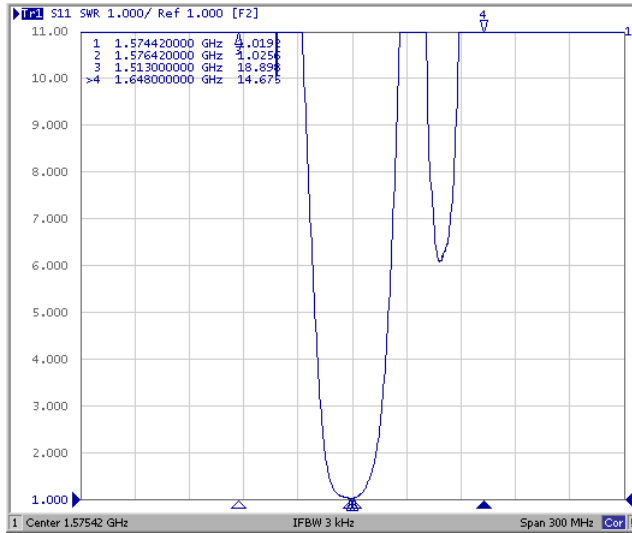
RoHS
Compliant



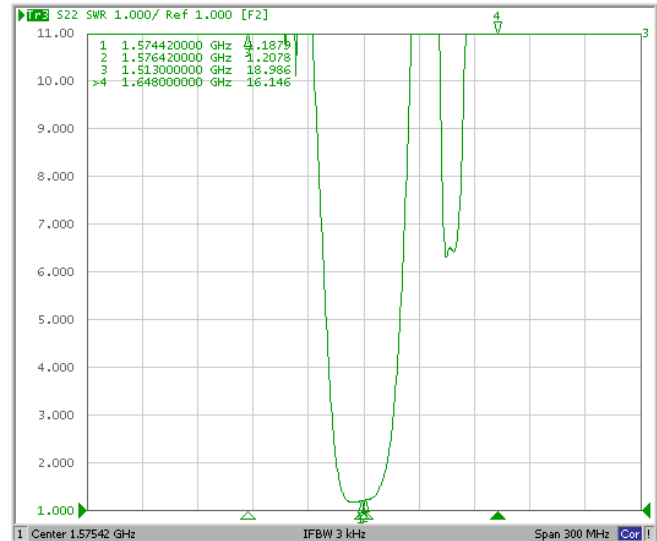
2.0 x 1.6 x 0.9 mm

REFLECTION FUNCTIONS:

S11

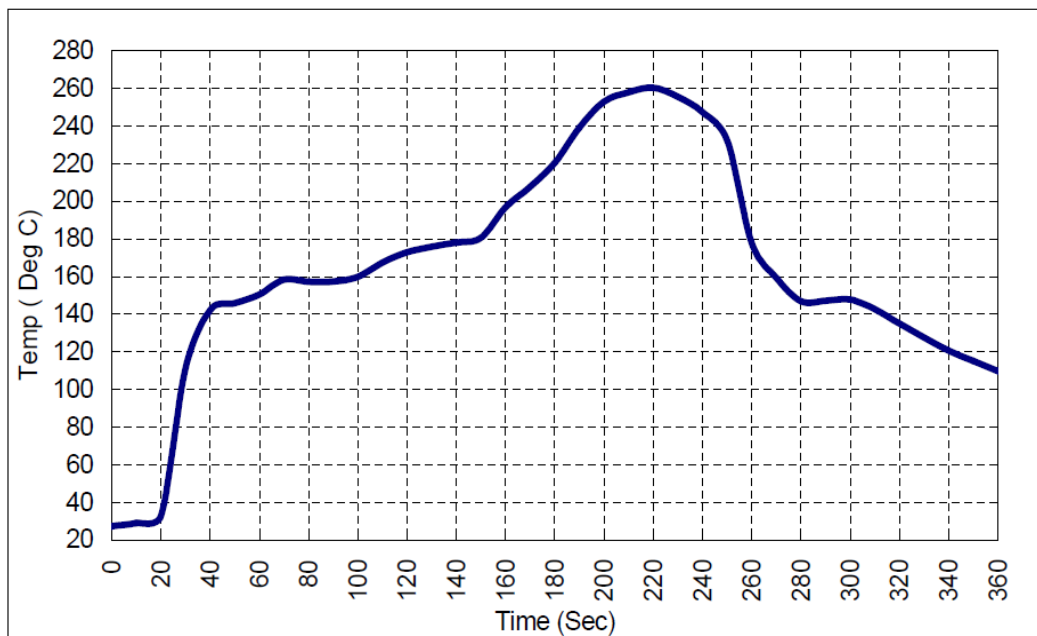


S22



Note # 2: Detail S-parameter information (.s2p file) available upon request

REFLOW PROFILE:

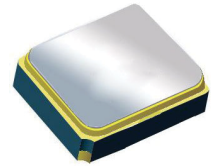


Surface Mount 1575.42MHz SAW Filter

AFS20A02-1575.42-T3



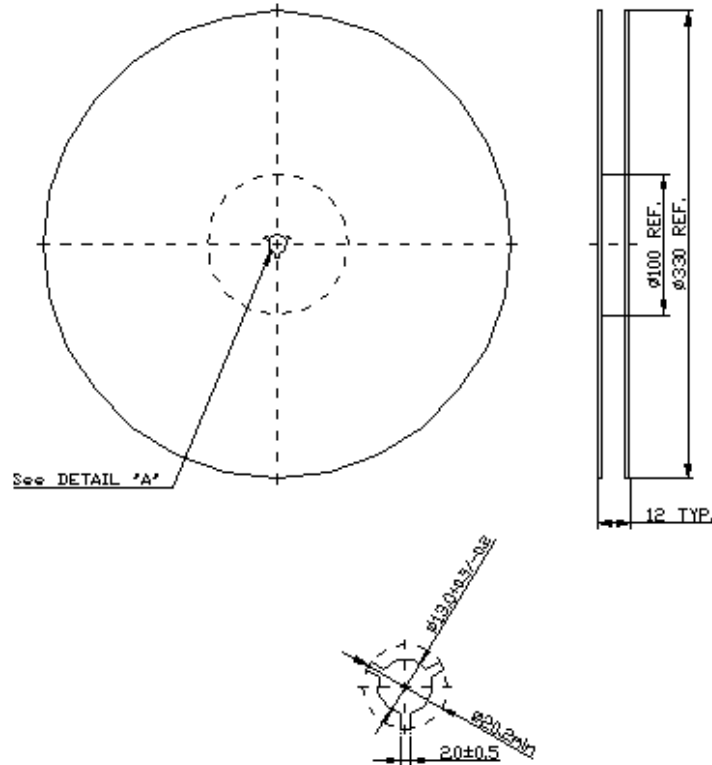
RoHS
Compliant



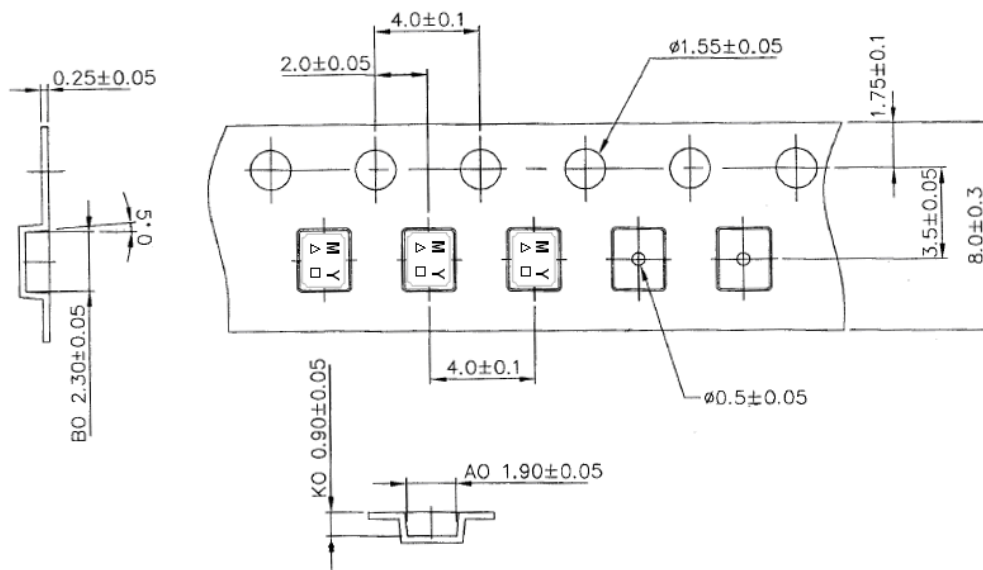
2.0 x 1.6 x 0.9 mm

PACKAGING: 3,000 units/reel “-T2” parts (2k/reel) are no longer available effective 01/01/2013

Reel Dimensions



Tape Dimensions



ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS
ISO 9001:2008
CERTIFIED



ABRACON
CORPORATION

Visit www.abracon.com for Terms & Conditions of Sale

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

Revised: 04.16.13