

5250MHz SMD SAW Filter



AFII-LW-0017

Request Samples



Check Inventory



1.8 x 1.4 x 0.65 mm
RoHS Compliant
MSL LEVEL=3

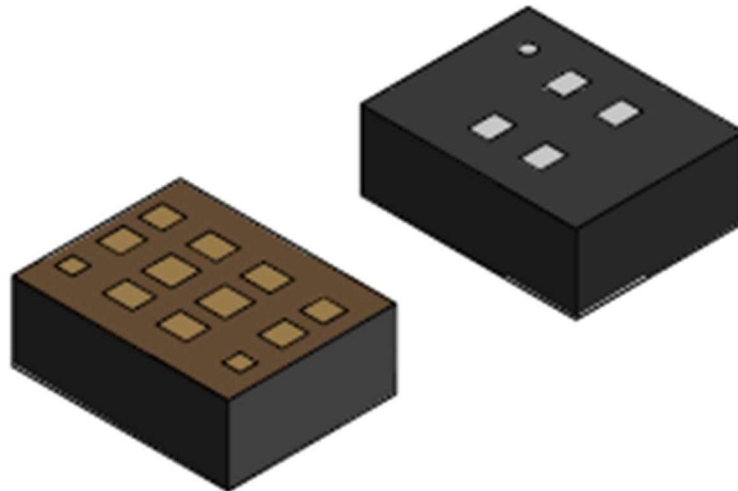
Features

- Bandpass SAW Filter with 160 MHz bandwidth
- Ultra-small Surface Mount 1.8 x 1.4 x 0.65 mm package
- Single-Ended Input and Output
- Excellent selectivity with high out-of-band rejection
- Ultra LAW (Lamb Acoustic Wave) technology

Applications

- Wireless Routers
- Residential Gateways
- Customer Premise Equipment
- Wi-Fi UNII1-2a indoor and outdoor use

Product Image



5250MHz SMD SAW Filter



AFII-LW-0017

Request Samples



Check Inventory



1.8 x 1.4 x 0.65 mm
RoHS Compliant
MSL LEVEL=3

Electrical Specification

Parameters	Minimum	Typical	Maximum	Units	Notes
Insertion Loss	-	2.0	2.6	dB	5170 - 5330MHz
Amplitude Ripple	-	-	0.8	dB	5170 - 5330MHz
Absolute Attenuation	30	37	-	dB	30 - 2400 MHz
	30	37	-		2400 - 2500 MHz
	30	34	-		2400 - 3000 MHz
	30	37	-		3400- 3800 MHz
	30	37	-		3800 - 4900 MHz
	35	42	-		4400 - 4800 MHz
	20	28	-		4800 -5000 MHz
	50	60	-		5170 - 5330 MHz
	20	24	-		7200 - 7500 MHz
	15	18	-		10300 - 11800 MHz
VSWR	-	1.48	1.7		5170 - 5330MHz
DC Voltage	-	-	3	V	
Input Power	-	-	28	dBm	
Source Impedance (single ended)	-	50	-	Ω	
Load Impedance (single ended)	-	50	-	Ω	

Notes: (1) With Matching Network (Ref. Testing Environment Circuit as shown below)

5250MHz SMD SAW Filter



AFII-LW-0017

Request Samples



Check Inventory



1.8 x 1.4 x 0.65 mm
RoHS Compliant
MSL LEVEL=3

Mechanical Specification

Parameters	Specifications
Dimension	1.8 x 1.4 x 0.65 mm
Mounting Type	SMD Mount

Environmental Specification

Parameters	Specifications
Operating Temperature Range	-40°C ~ +105°C
Storage Temperature Range	-20°C ~ +95°C
RoHS Complaint	Yes
Maximum Input Power(dBm)	+28@50°C
ESD Voltage (HBM)	> 100 V
ESD Voltage (CDM)	> 100 V
Moisture Sensitivity Levels	3

5250MHz SMD SAW Filter



AFII-LW-0017

Request Samples



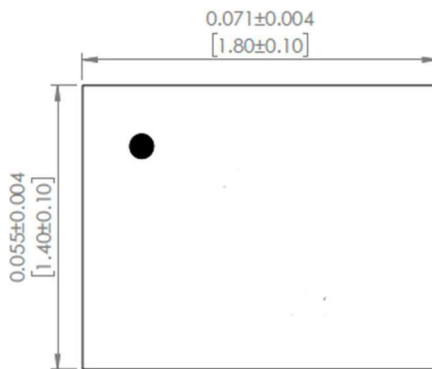
Check Inventory



1.8 x 1.4 x 0.65 mm
RoHS Compliant
 MSL LEVEL=3

Product Dimensions

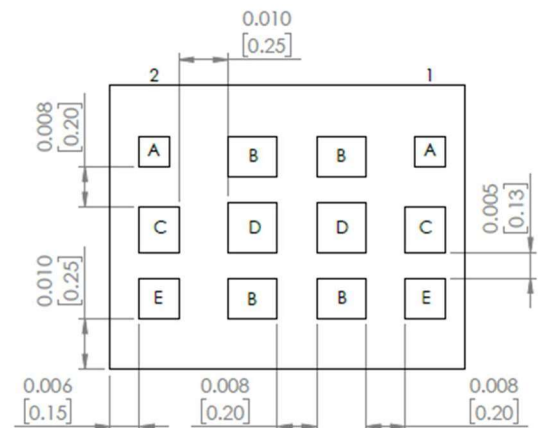
Units : INCHES [mm]



TOP VIEW



SIDE VIEW

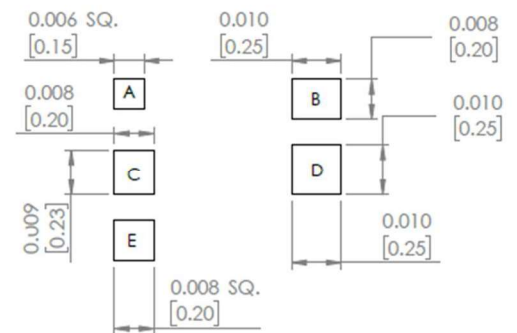


BOTTOM VIEW



FRONT VIEW

Pin #	Function
1	Output
2	Input
Others	Ground



All tolerances are ± 0.05 mm except overall length and width ± 0.10 mm



AFII-LW-0017

Request Samples

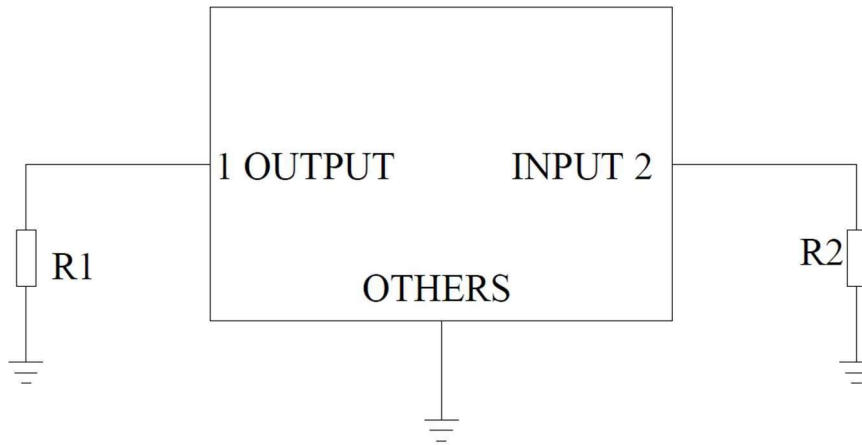


Check Inventory



1.8 x 1.4 x 0.65 mm
RoHS Compliant
 MSL LEVEL=3

Measurement Circuit



Port	Matching Component
Input	R1: 50Ω
Output	R2: 50Ω

1. Matching component values shown are recommended based on the evaluation board. Value adjustment may be required on the end-user's circuit boards for the selected component manufacturer and PCB material.

5250MHz SMD SAW Filter



AFII-LW-0017

Request Samples



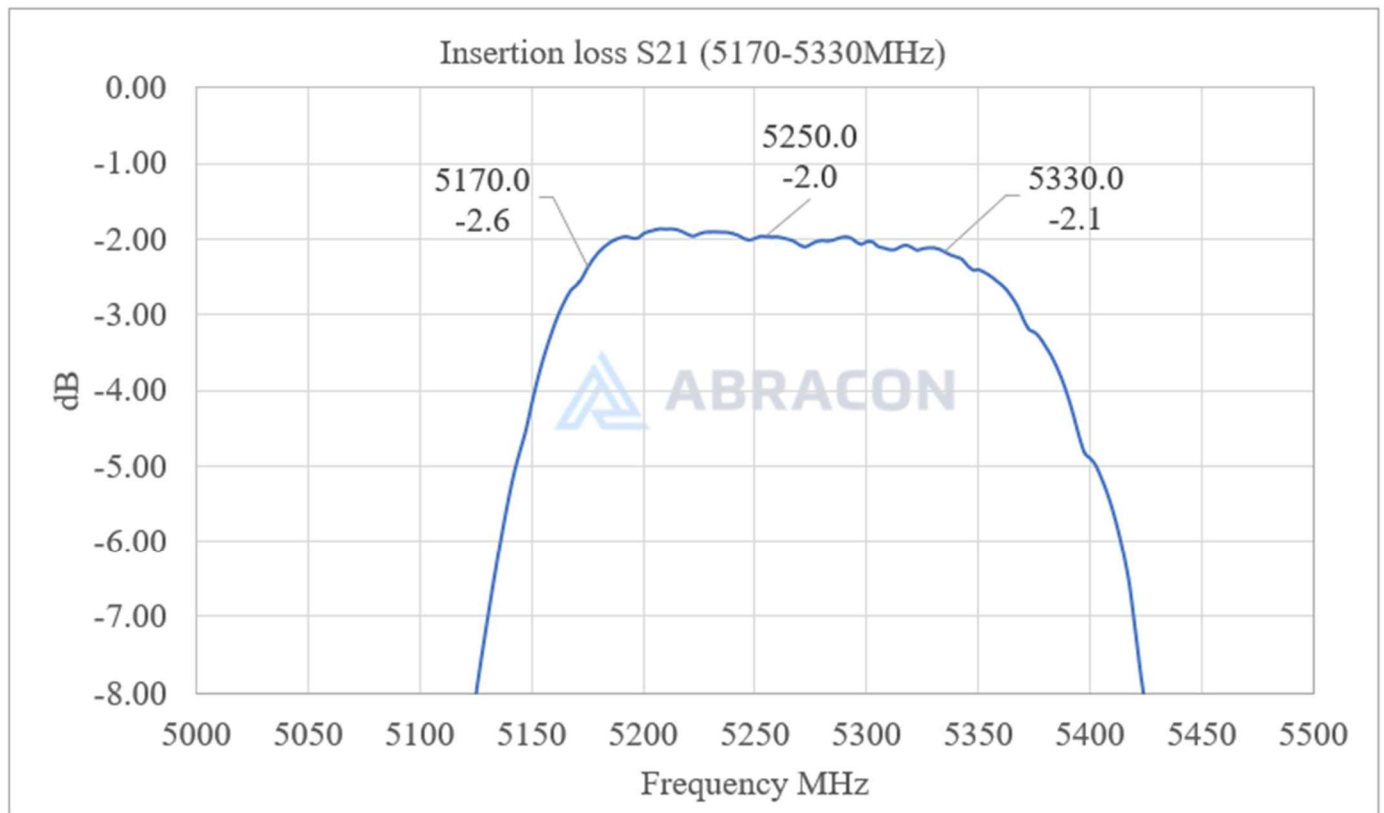
Check Inventory



1.8 x 1.4 x 0.65 mm
RoHS Compliant
MSL LEVEL=3

Frequency Characteristics

S21 narrow band



5250MHz SMD SAW Filter



AFII-LW-0017

Request Samples

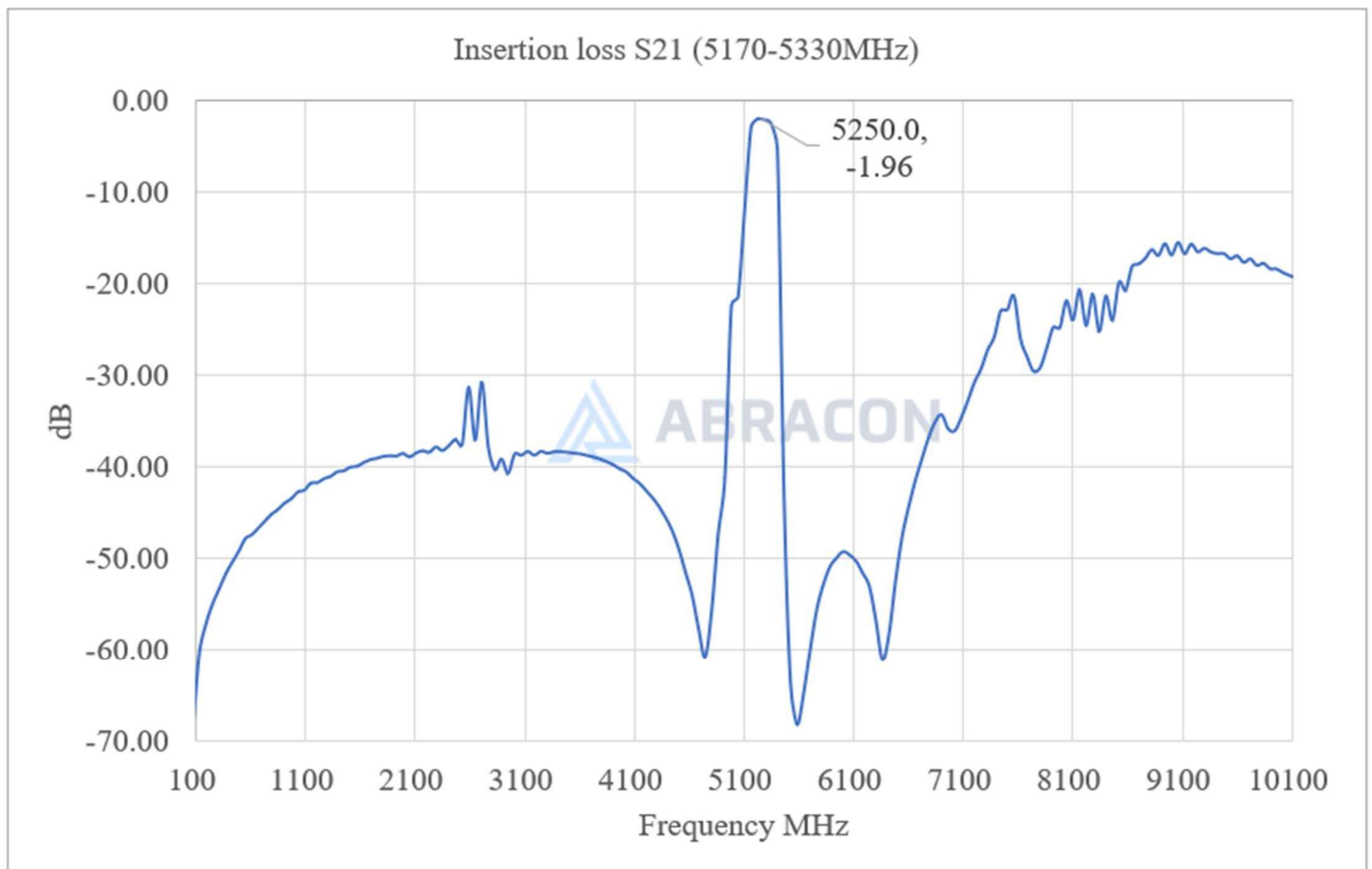


Check Inventory



1.8 x 1.4 x 0.65 mm
RoHS Compliant
MSL LEVEL=3

S21 wide band



5250MHz SMD SAW Filter



AFII-LW-0017

Request Samples

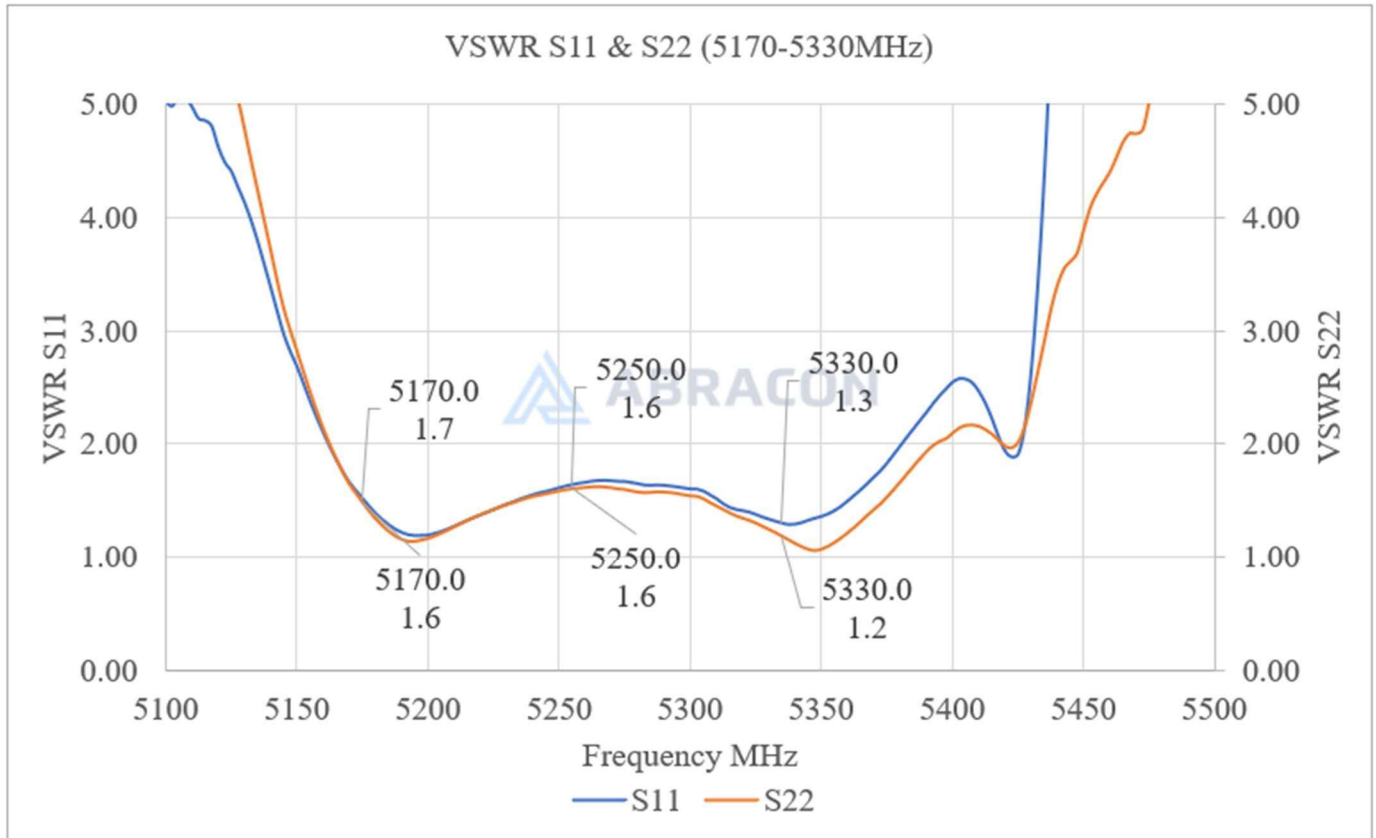


Check Inventory



1.8 x 1.4 x 0.65 mm
RoHS Compliant
MSL LEVEL=3

VSWR (S11 & S22)



5250MHz SMD SAW Filter



AFII-LW-0017

Request Samples



Check Inventory



1.8 x 1.4 x 0.65 mm
RoHS Compliant
MSL LEVEL=3

Reflow Profile

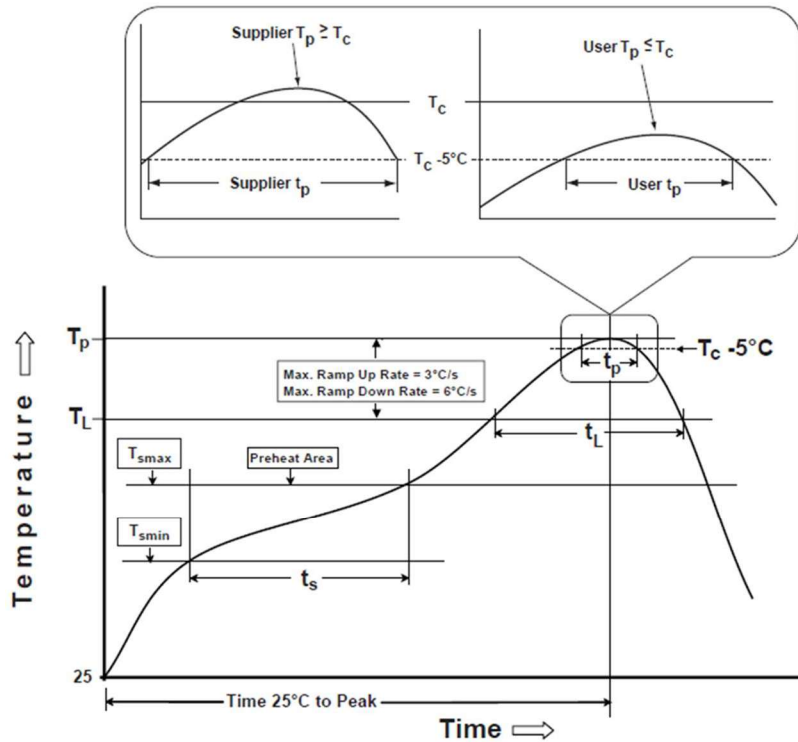


Table 1

SnPb Eutectic Process Classification Temperatures (T_c)

Package Thickness	Volume mm ³ <350	Volume mm ³ >350
<2.5 mm	235 °C	220 °C
≥2.5 mm	220 °C	220 °C

Table 2

Pb-Free Process Classification Temperatures (T_c)

Package Thickness	Volume mm ³ <350	Volume mm ³ 350-2000	Volume mm ³ >2000
<1.6 mm	260 °C	260 °C	260 °C
1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
>2.5 mm	250 °C	245 °C	245 °C

Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Preheat / soak		
Temperature minimum (T _{smin})	100°C	150°C
Temperature maximum (T _{smax})	150°C	200°C
Time (T _{smin} to T _{smax}) (t _s)	60 - 120 sec.	60 - 120 sec.
Average ramp-up rate (T _{smax} to T _p)	3°C/sec. max	3°C/sec. max
Liquidous temperature (T _L)	183°C	217°C
Time at liquidous (t _L)	60 - 150 sec.	60 - 150 sec.
Peak package body temperature (T _p)*	see Table 1	see Table 2
Time (t _p)** within 5°C of the specified classification temperature (T _c)	20 sec.	30 sec.
Ramp-down rate (T _p to T _{smax})	6°C/sec. max	6°C/sec. max
Time 25°C to peak temperature	6 min. max	8 min. max
Reflow cycles	2 max	2 max

*Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

**Tolerance for time at peak profile temperature (t_p) is defined as supplier minimum and a user maximum.

5250MHz SMD SAW Filter



AFII-LW-0017

Request Samples



Check Inventory



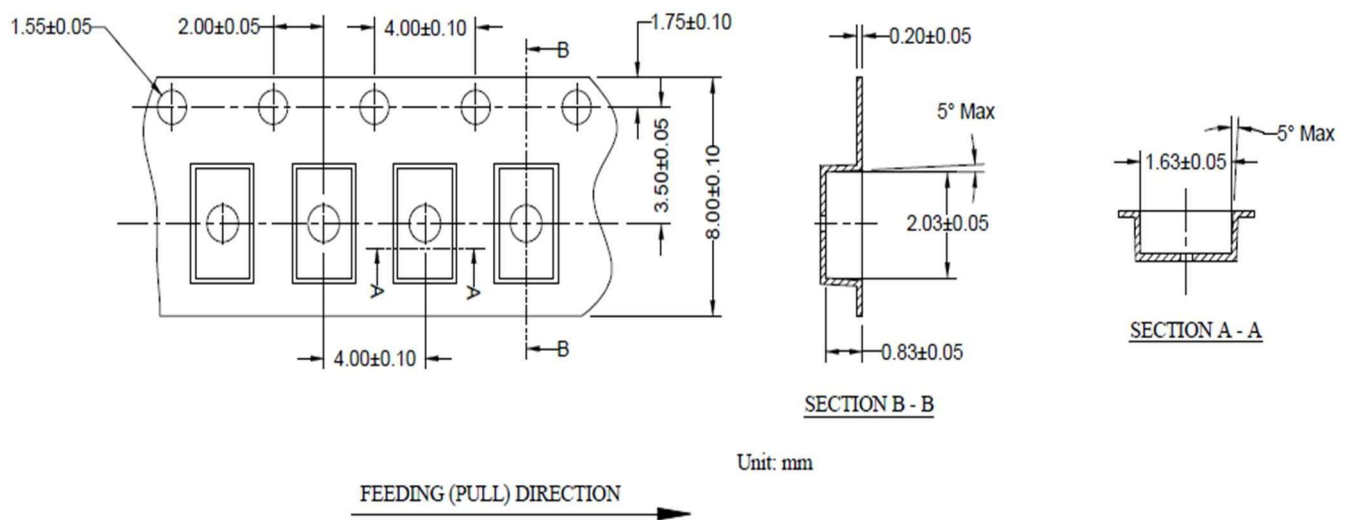
1.8 x 1.4 x 0.65 mm
RoHS Compliant
MSL LEVEL=3

Packaging

Tape & Reel

- 4Kpcs/reel

Tape (Unit: mm)



5250MHz SMD SAW Filter



AFII-LW-0017

Request Samples

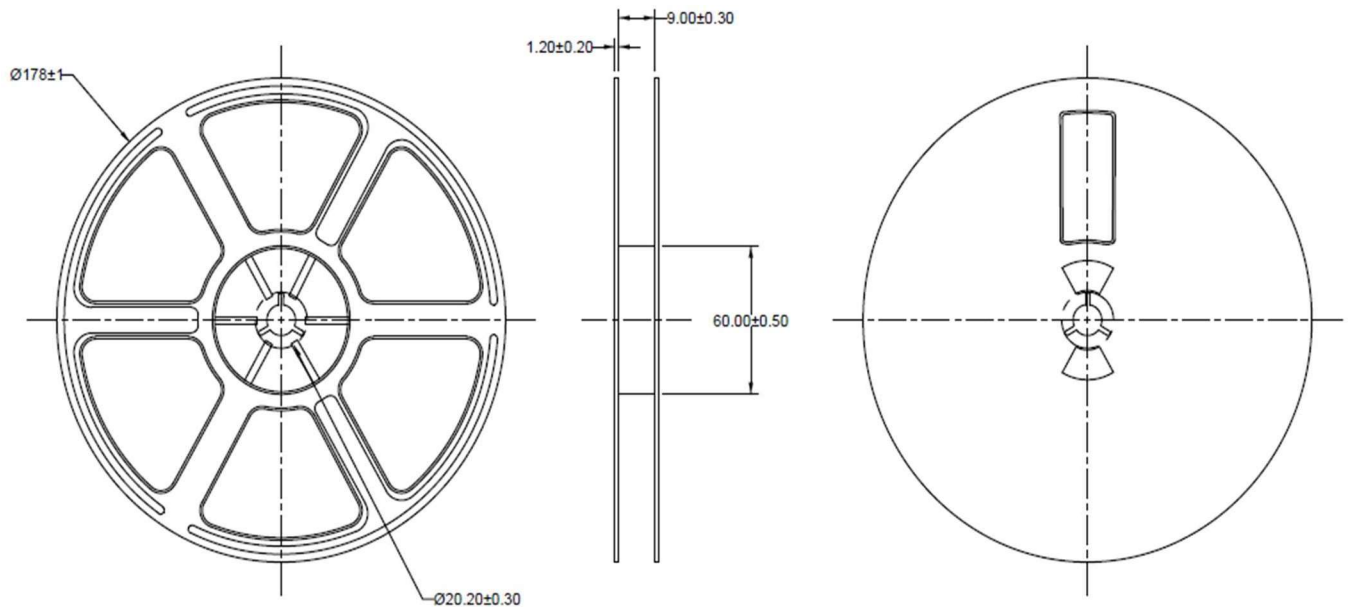


Check Inventory



1.8 x 1.4 x 0.65 mm
RoHS Compliant
MSL LEVEL=3

Reel (Unit: mm)



Unit: mm

ATTENTION: Abracon LLC'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-dependent 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 LLC is required. Please contact Abracon LLC for more information.



5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 02-09-24

ABRACON IS
ISO9001-2015
CERTIFIED