

# 881.5 MHz SMD SAW Filter

**ABSNS6A7-1CHM011M**

Request Samples



Check Inventory



**3.0 x 3.0 x 1.3 mm**  
**RoHS Compliant**

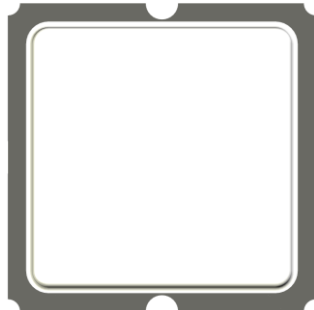
## Features

- Bandpass SAW Filter with 25 MHz Bandwidth
- Surface Mount 3.0 x 3.0 x 1.3 mm package
- Single-Ended Input and Output
- Excellent selectivity with high out-of-band

## Applications

- CDMA, WCDMA 850 and AMPS applications
- Wireless infrastructure
- Distributed Antenna Systems (DAS)
- Repeaters and PCS Applications

## Product Image



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## Electrical Specification

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency (fc)	-	881.5	-	MHz	
Insertion Loss	-	2.2	3.0	dB	869~894MHz
Amplitude Ripple	-	0.6	1.5	dB <sub>p-p</sub>	869~894MHz
Attenuation	50	60	-	dB	D.C.~779 MHz
	42	47	-		779~849 MHz
	26	30	-		914~970 MHz
	50	58	-		970~1049 MHz
	45	55	-		1049~2000 MHz
VSWR	-	1.6	2.0	-	869~894MHz
DC Voltage	-	-	5	V	
Input Power	-	-	15	dBm	
Source Impedance (single ended) <sup>1</sup>	-	50	-	Ω	
Load Impedance (single ended) <sup>1</sup>	-	50	-	Ω	

Noes: (1) No Matching Network (Ref. Testing Environment Circuit as shown below)

## Mechanical Specification

Parameters	Specifications
Dimension	3.0 x 3.0 x 1.3 mm
Mounting Type	SMD Mount

## Environmental Specification

Parameters	Specifications
Operating Temperature Range	-30°C ~ +85°C
Storage Temperature Range	-40°C ~ +85°C
MSL level	N/A
ESD	N/A



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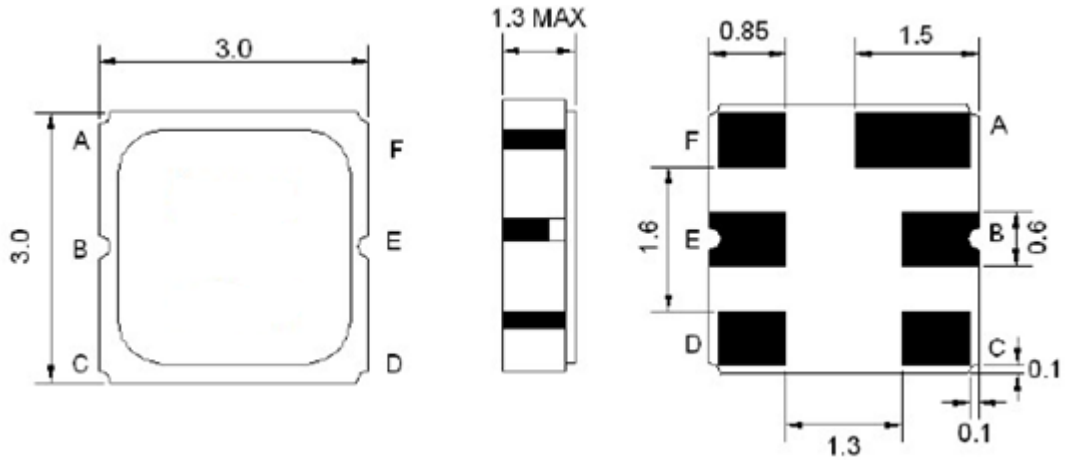


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## Product Dimensions



Unit : mm

Pin No.	Description
A,C,D,F	Ground
E	Input
B	Output

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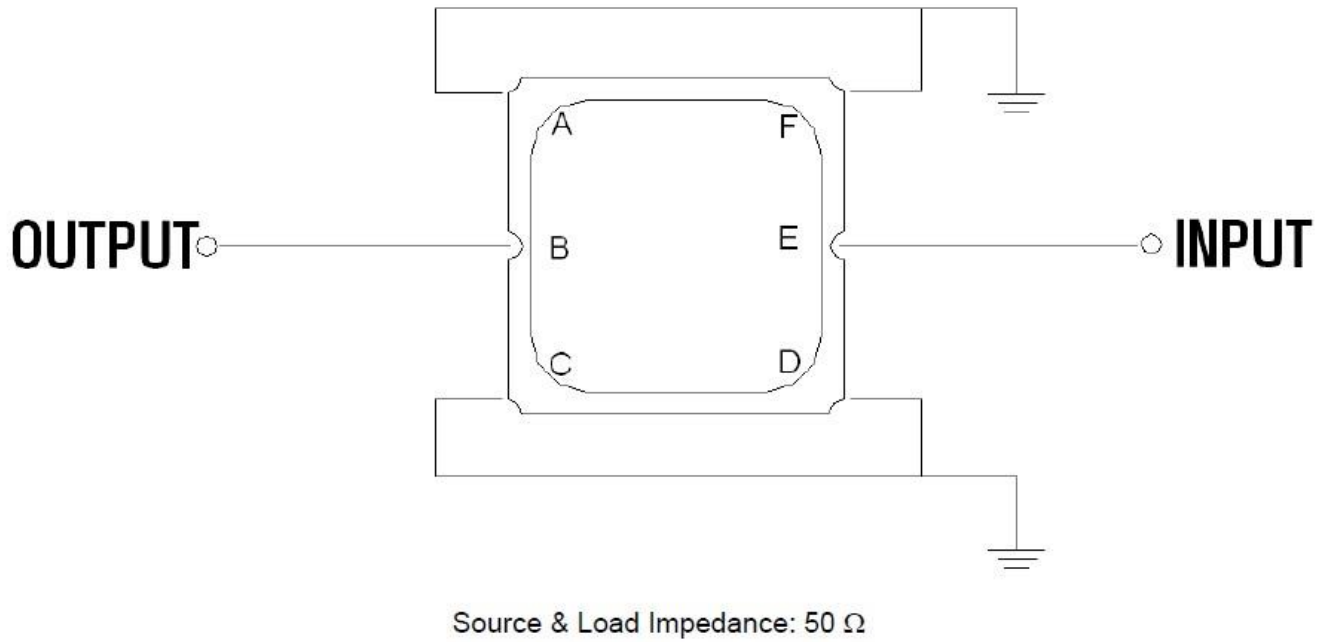


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## Measurement Circuit



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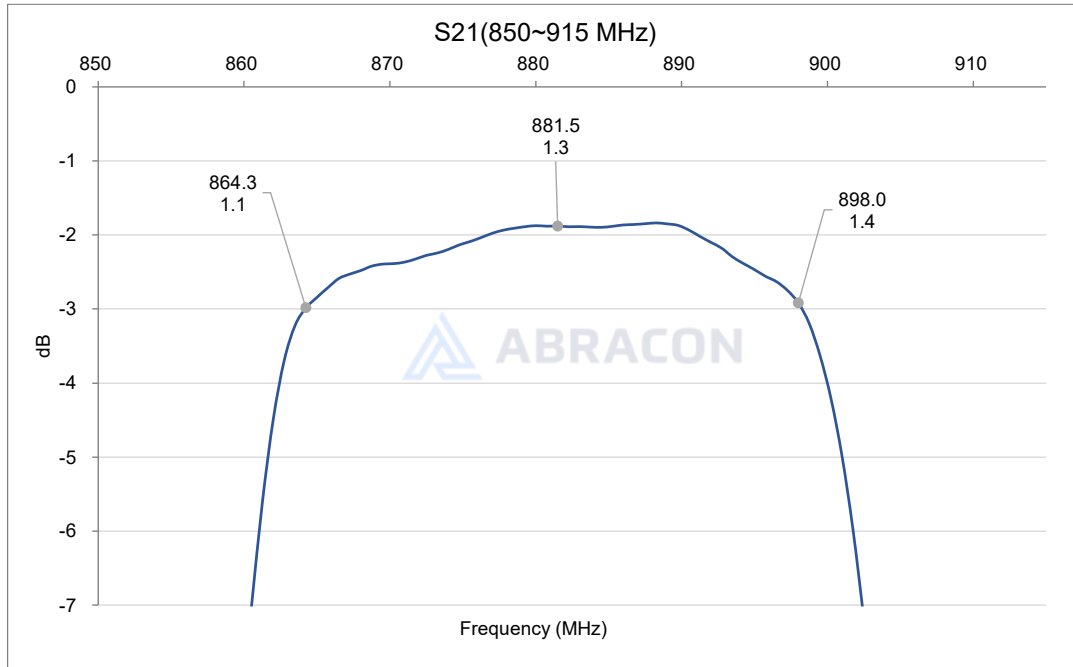
Check Inventory



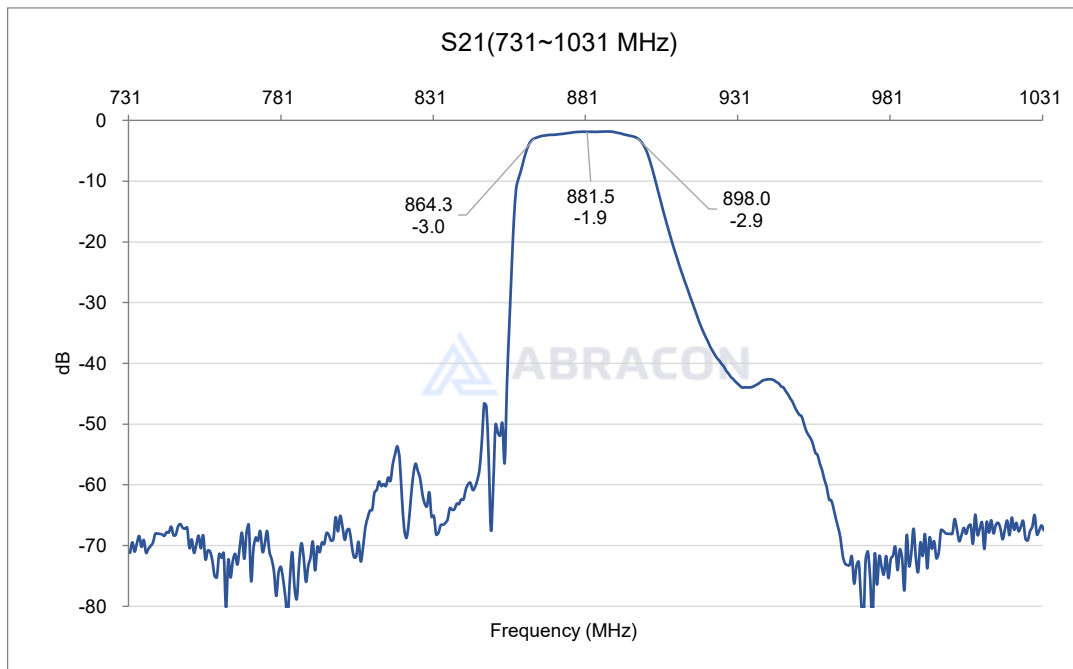
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## Frequency Characteristics

S21 narrow band



S21 wide band



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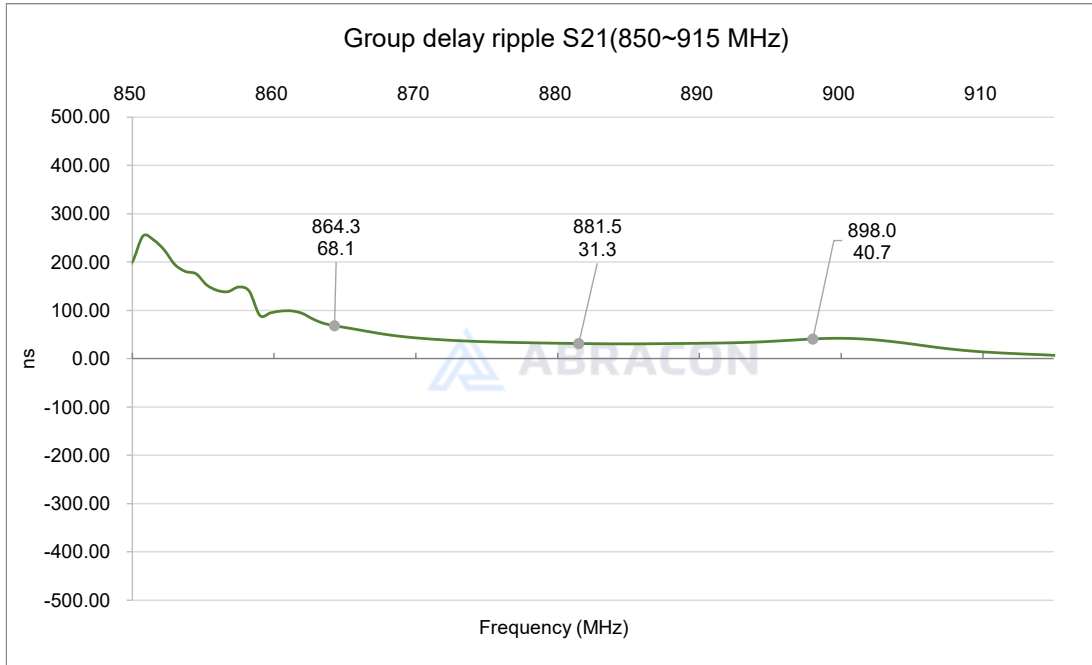


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## Group Delay Ripple



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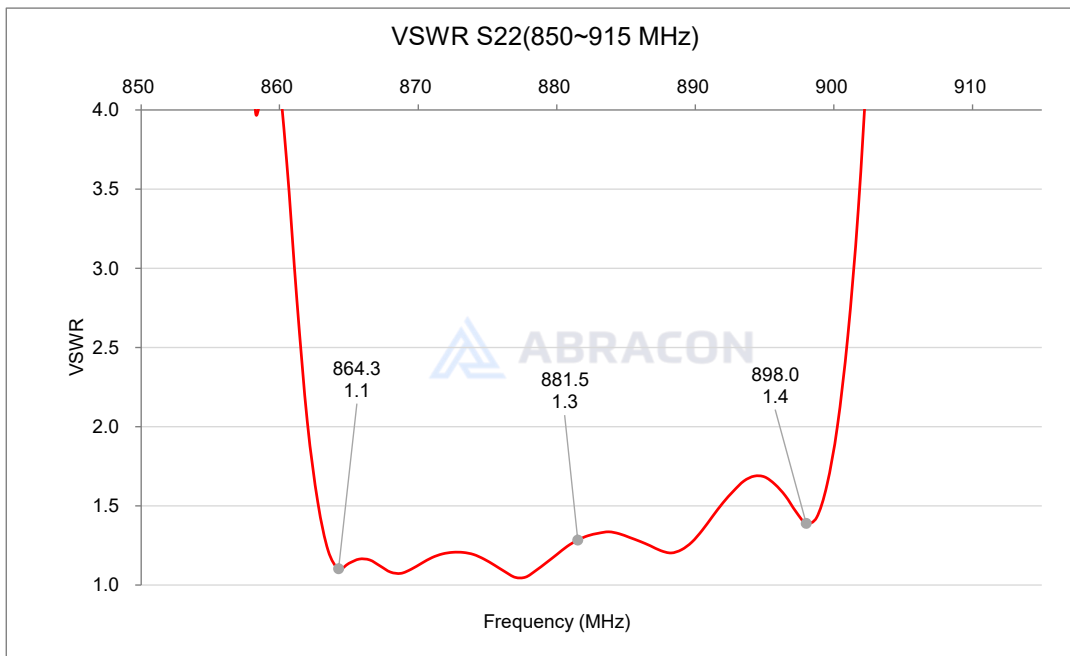
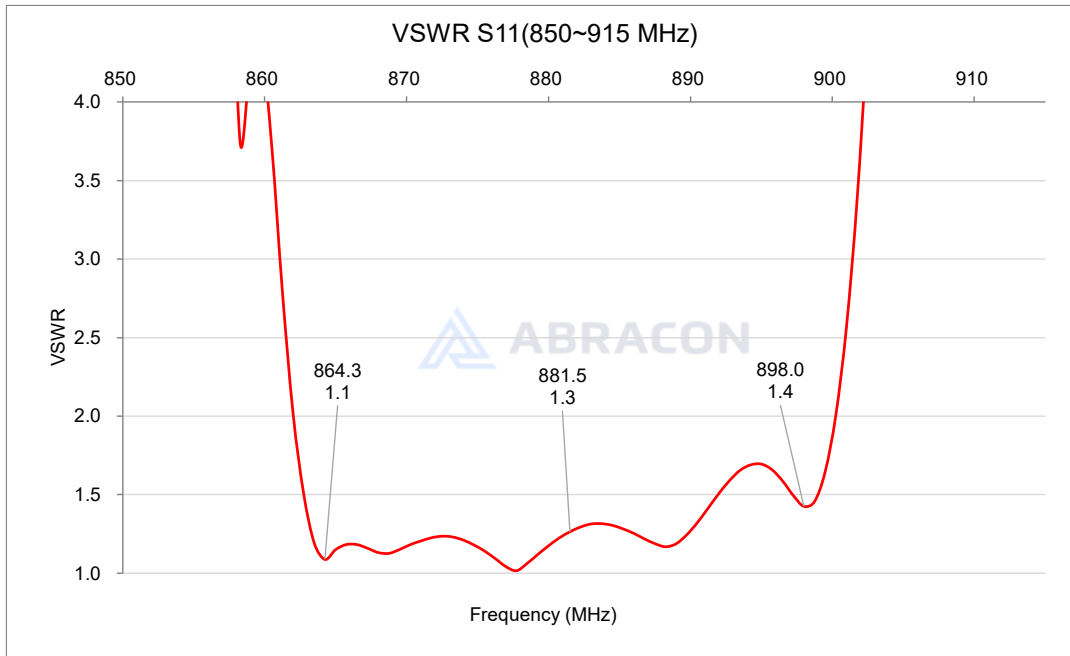


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VSWR (S11 & S22)



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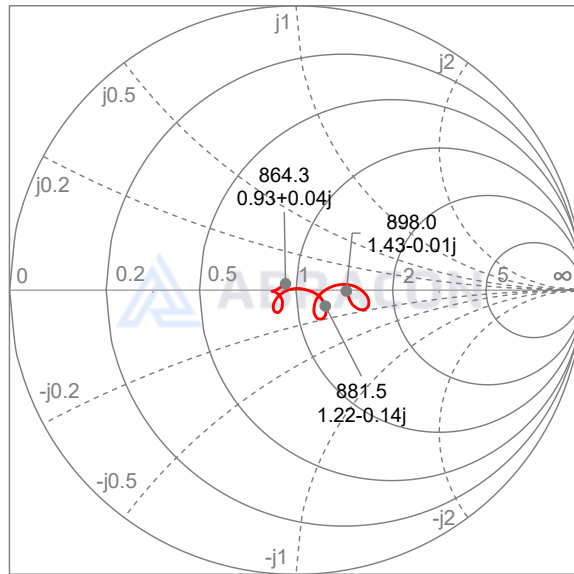
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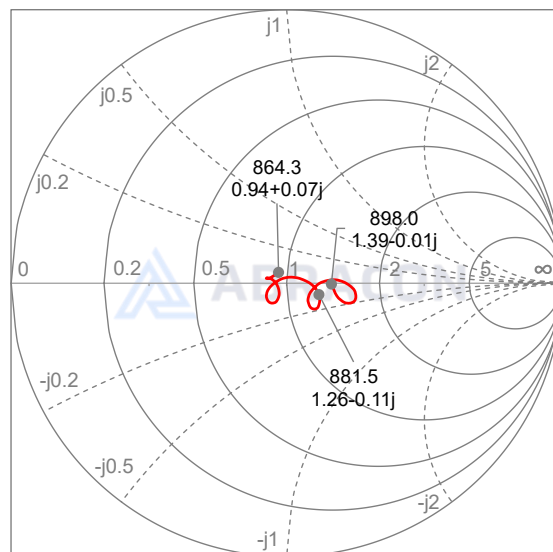
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Smith Chart (S11 & S22)

Smith chart S11 (864~898MHz)



Smith chart S22 (864~898MHz)





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## Reflow Profile [JEDEC J-STD-020]

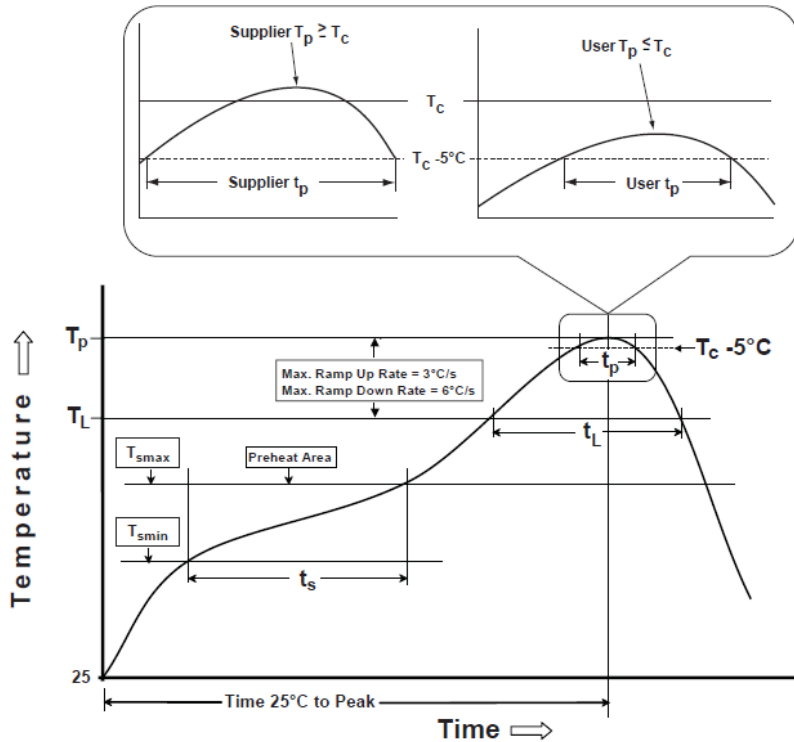


Table 1

SnPb Eutectic Process  
Classification Temperatures ( $T_c$ )

Package Thickness	Volume mm <sup>3</sup> <350	Volume mm <sup>3</sup> ≥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 <sup>3</sup> <350	Volume mm <sup>3</sup> 350-2000	Volume mm <sup>3</sup> >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.

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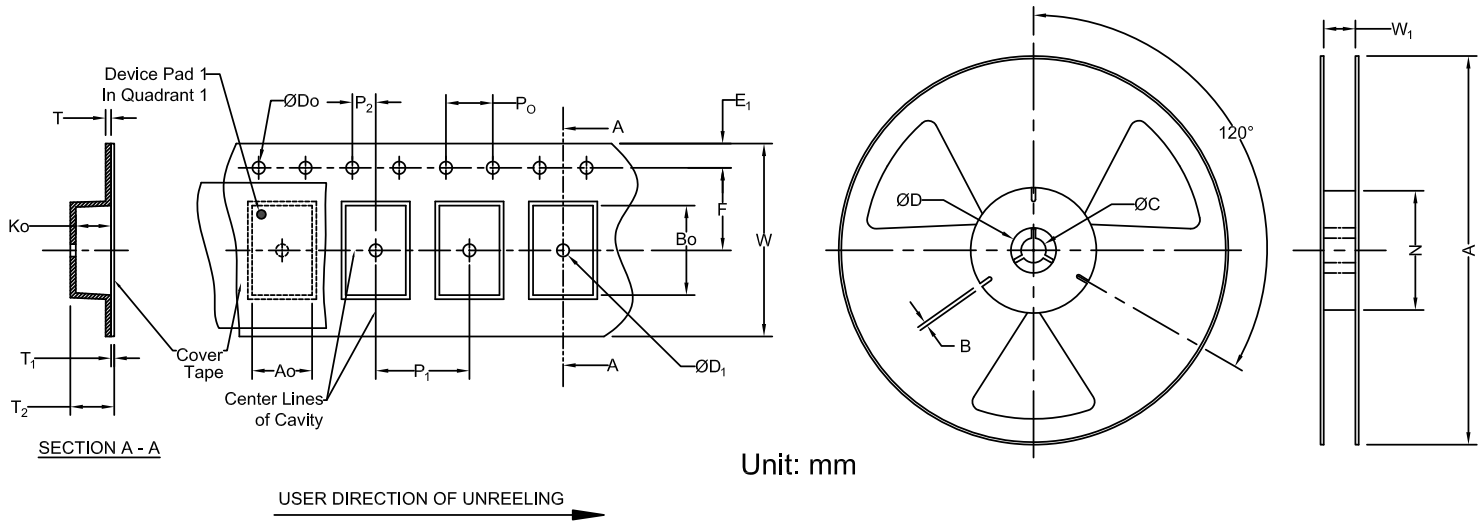
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## Packaging

### Tape & Reel Dimension



### Carrier Tape Specifications (mm)

E1	P0	F	P1	W	A0	B0	K0	Reel Qty
1.75 ± 0.1	4.0 ± 0.1	5.5 ± 0.10	8.0 ± 0.1	12.0 ± 0.3	3.4 ± 0.1	3.4 ± 0.1	1.4 ± 0.1	2,500

### Reel Specifications (mm)

A	W <sub>1</sub>	N	C
330 ± 1.0	12.0 ± 1.0	62 ± 1.0	13 ± 0.5

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