

1663 MHz 2-WAY RF POWER DIVIDER

APDD-RF-0003

Features

- Usable Bandwidth of 475 MHz
- Compact Package Size
- Low Insertion Loss

Applications

- WLAN, Bluetooth, LNB
- Turning circuit
- Mobile Applications

Electrical Specifications

Parameters	Specifications		
	Min	Typ	Max
Nominal Center Frequency (Fc) (MHz)	-	1663	
Frequency Range	1425	1663	1900
Insertion Loss (3dB)	-	±0.7	
Isolation(min) (dB)	-	≥25	
Input VSWR (in BW)	-	1.5	
Output VSWR (in BW)	-	1.5	
Phase Difference	-	≤ 1°	
Amplitude Difference	-	≤ 0.1	
In/Output Imped(Ω)		50	
Maximum Input Power (dBm)		34	

Mechanical Specifications

Parameters	Specifications
Filter Dimension	3.2 x 1.6 x 0.9 mm
Mounting Type	SMD Mount

Environmental Specifications

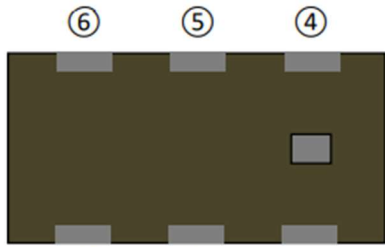
Parameters	Specifications
Operating Temperature Range	-40°C ~ +85°C
Storage Temperature Range	-40°C ~ +85°C
RoHS Compliant	Yes
ESD Sensitive	Yes

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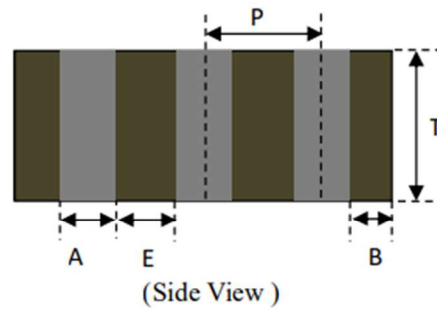
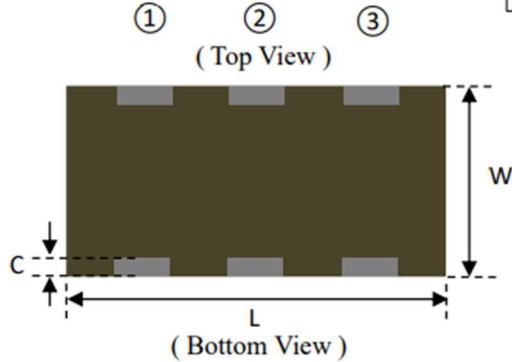
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Package Dimensions

Dimensions (Unit: mm)

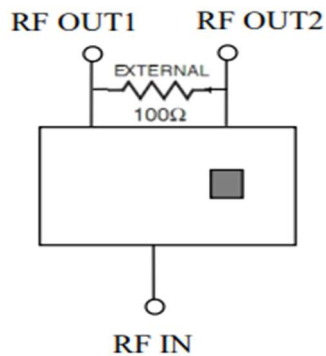


Number	Terminal Name	Number	Terminal Name
①	GND	④	RF out 1
②	RF In	⑤	GND
③	GND	⑥	RF out 2



Symbols	L	W	T	A	B	C	E	P
Dimensions	3.2+/-0.1	1.6+/-0.1	0.9+/-0.1	0.56+/-0.1	0.33+/-0.1	0.3+/-0.1	0.43+/-0.1	0.99+/-0.1

External Electrical Schematic

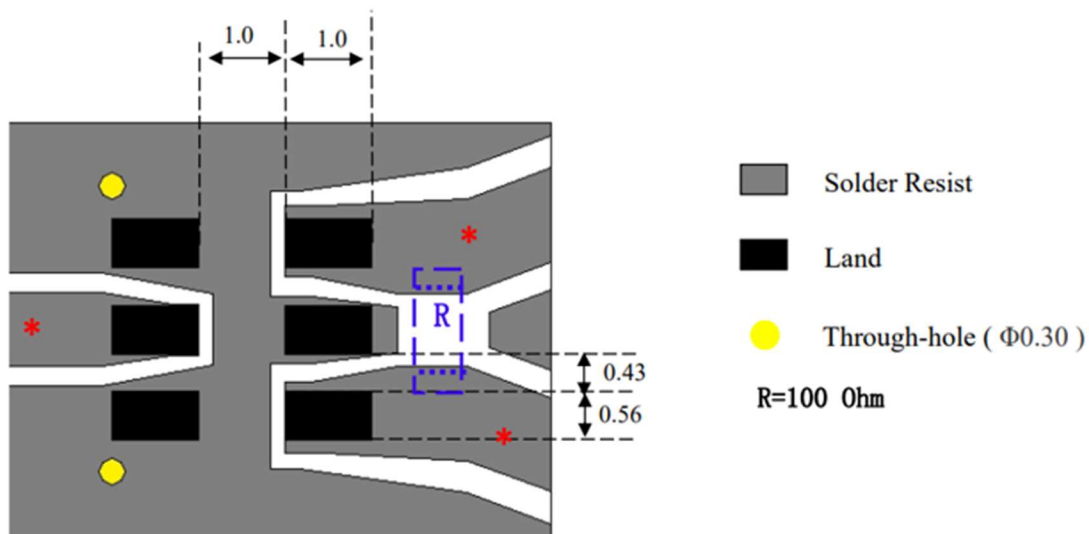


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Footprint

Unit: mm



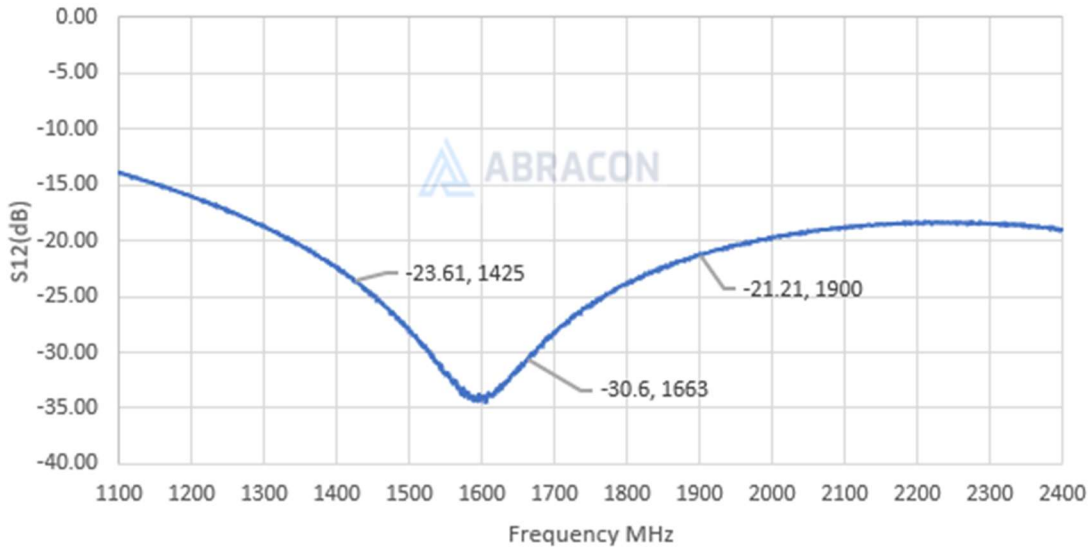
- * Line width should be designed to match $50\ \Omega$ characteristic impedance, depending on PCB material and thickness.

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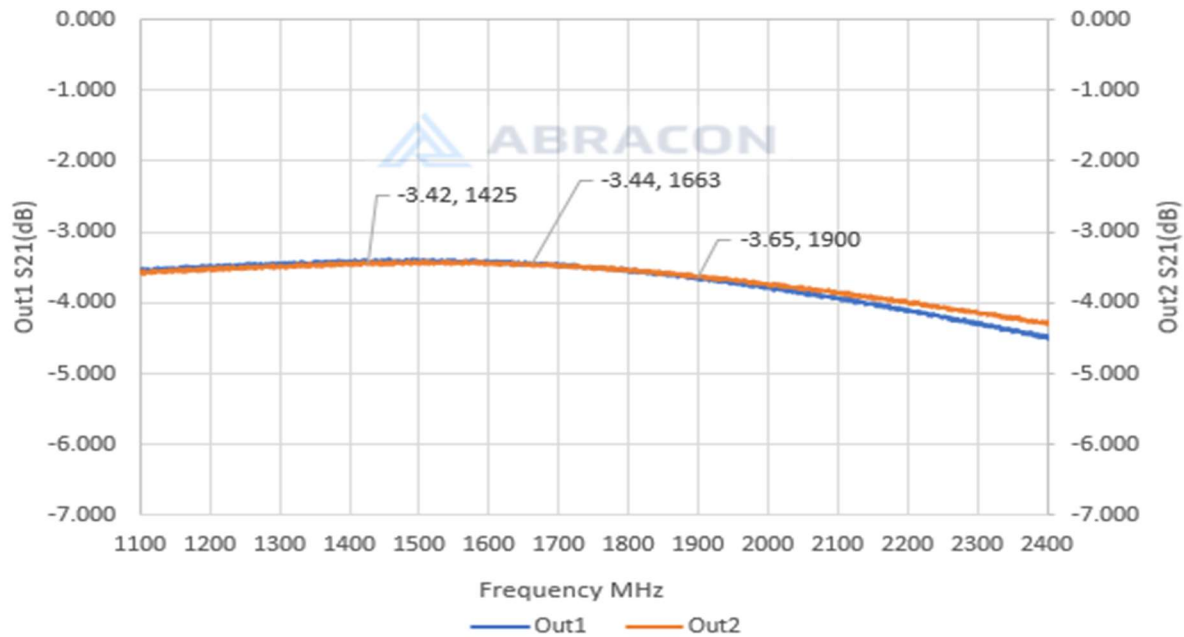
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Transmission Characteristics

Isolation S12 (1425~1900 MHz)



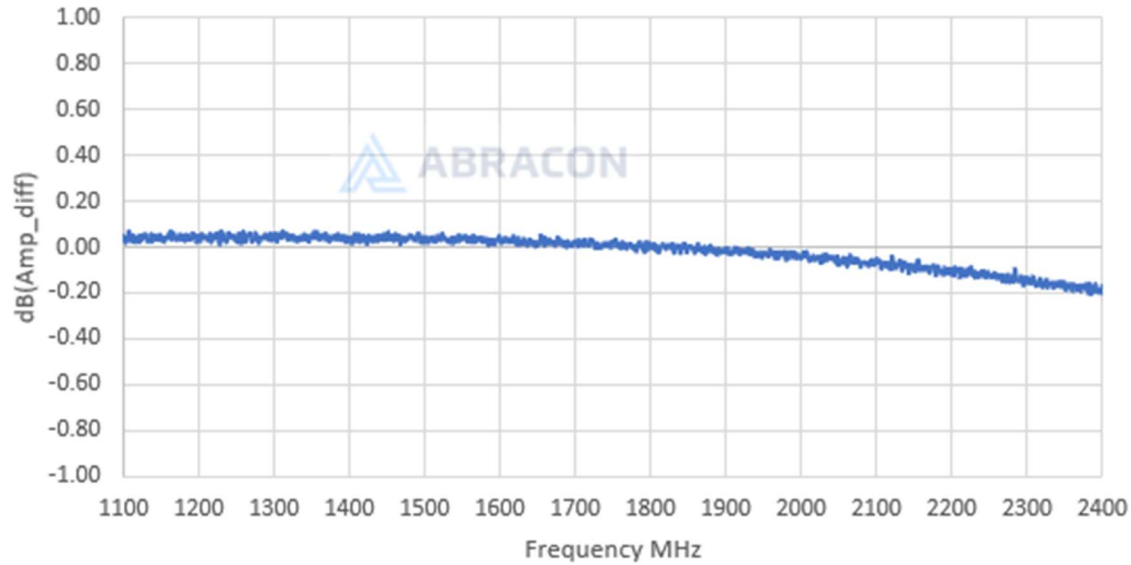
Insertion Loss (1425~1900 MHz)



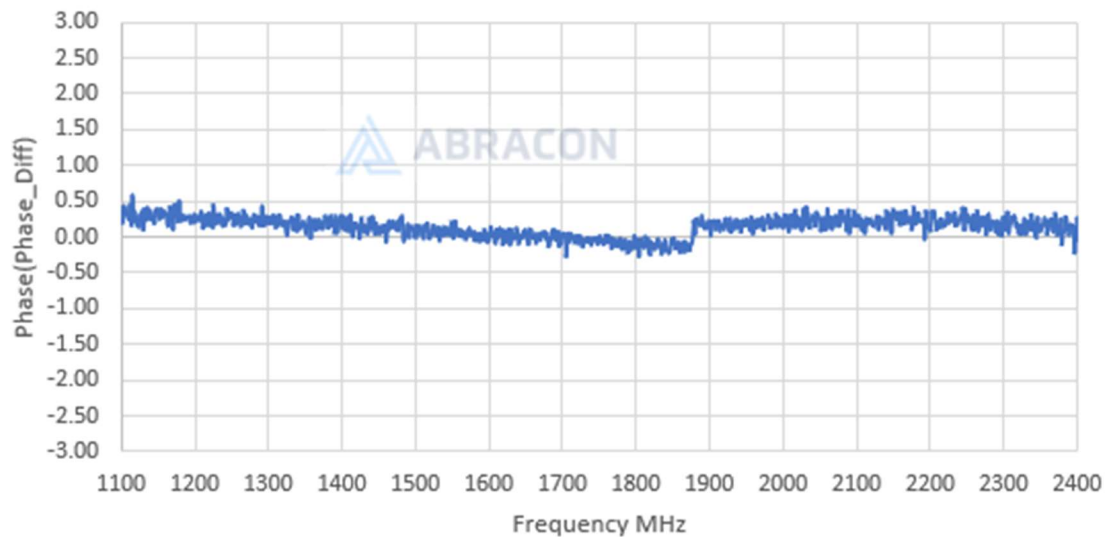
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Amplitude Diff (1425~1900 MHz)

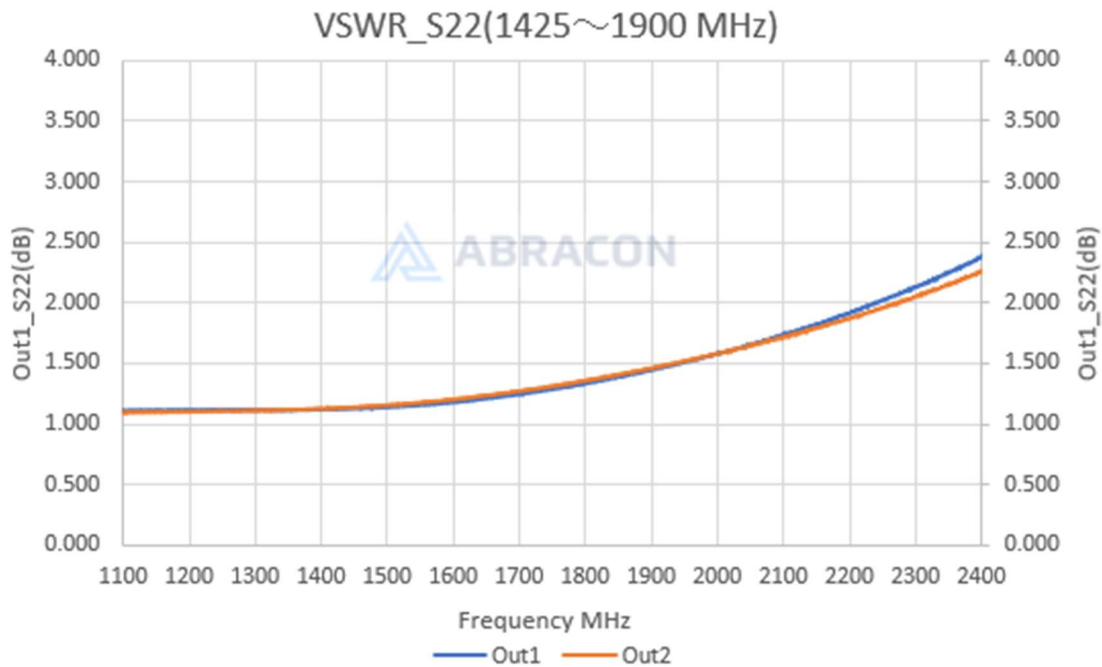
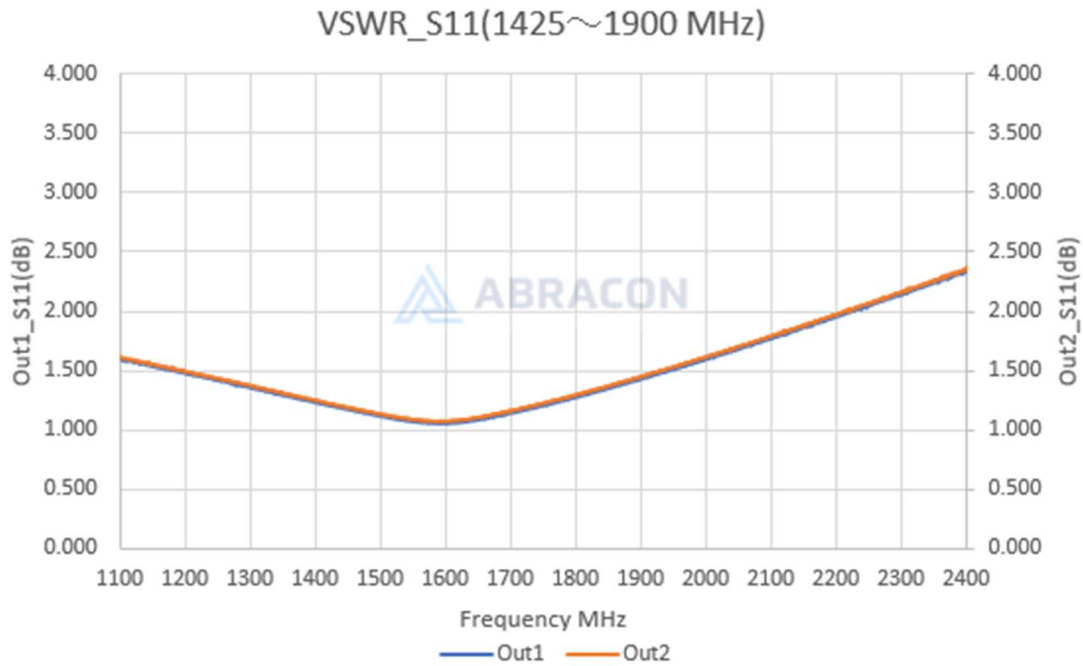


Phase Diff S21(1425~1900 MHz)



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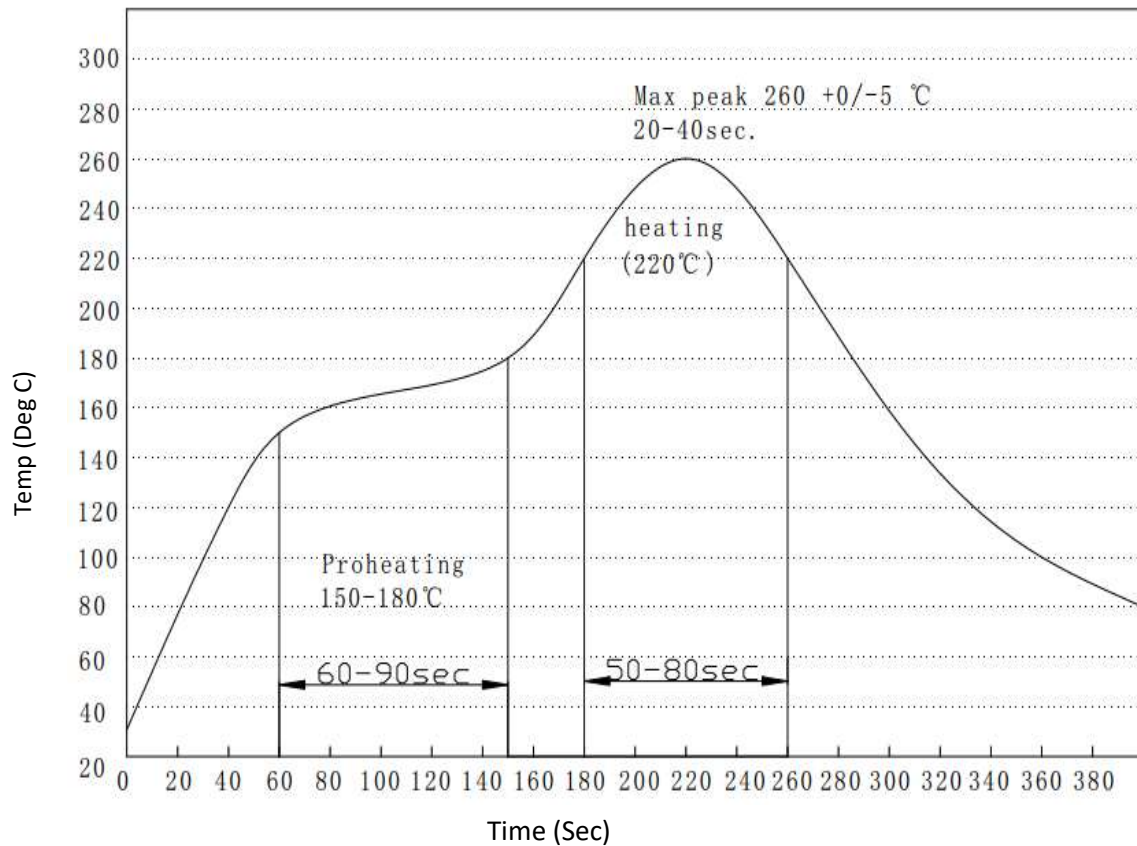
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Recommended Reflow Profile



1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (20~40sec).
4. Time: 2 times.

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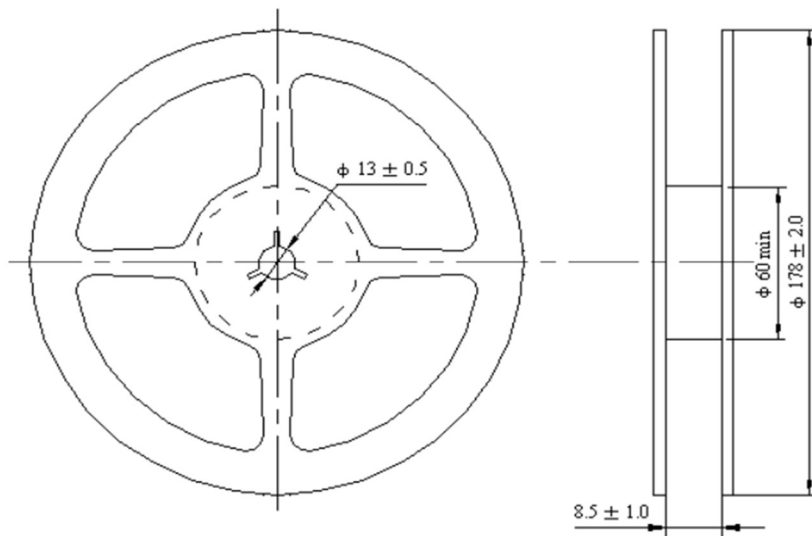
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Packaging

Packaging Type: Reel and Tape

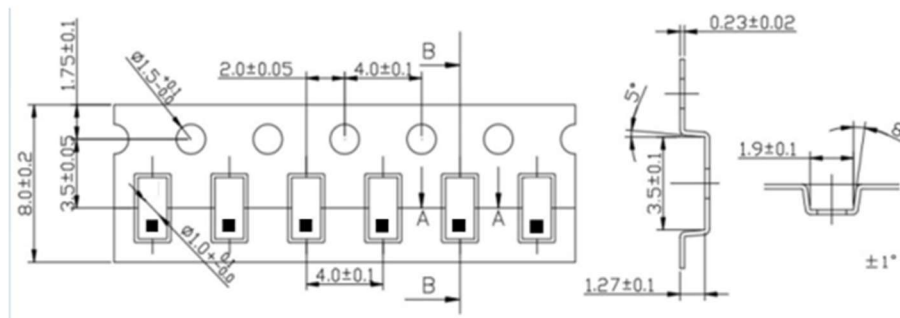
Pieces per Reel: 3000

Reel Dimension



Unit: mm

Tape Dimension



Unit: mm

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