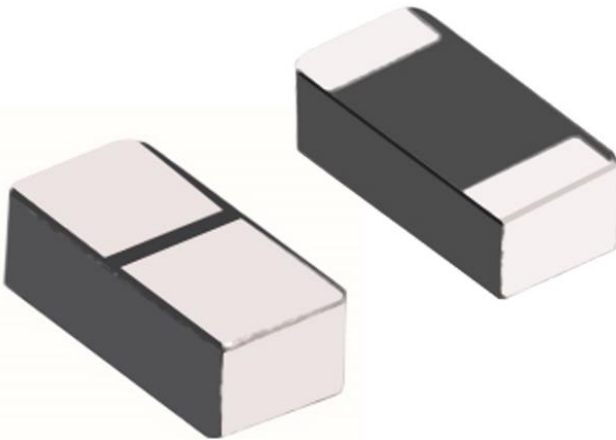


W3155

6240-9235MHz UWB Antenna

Chip Antenna



Features & Applications:

- 6.24-9.235GHz
- UWB Channels 5-12
- Stable radiation pattern over operating band enables superior performance in impulse radio
- Keep out area only 8x5mm
- Miniature Antenna size 3.2x1.6x1.1mm
- Moisture Sensitivity Level: MSL1

ELECTRICAL SPECIFICATIONS @ 25°C

General Specifications

Antenna type	Nominal Impedance	Polarization	Radiation pattern	Power withstanding
Monopole	50Ω	Linear	Omni	5W

Frequency (MHz)	6240-9235
VSWR	<2
Peak Gain (dBi)	3
Efficiency (%)	55

MECHANICAL SPECIFICATIONS

W3155

Dimension (Length x Width x Height)	Material	Radiator	Weight	Fixing System
3.2x1.6x1.1mm	High temperature ceramic	Ag	33mg	SMT

ENVIRONMENTAL SPECIFICATIONS

W3155

Operating Temperature	Ingress Protection	RoHS Compliant	MSL level
-40/+85° C	N/A	Yes	MSL 1

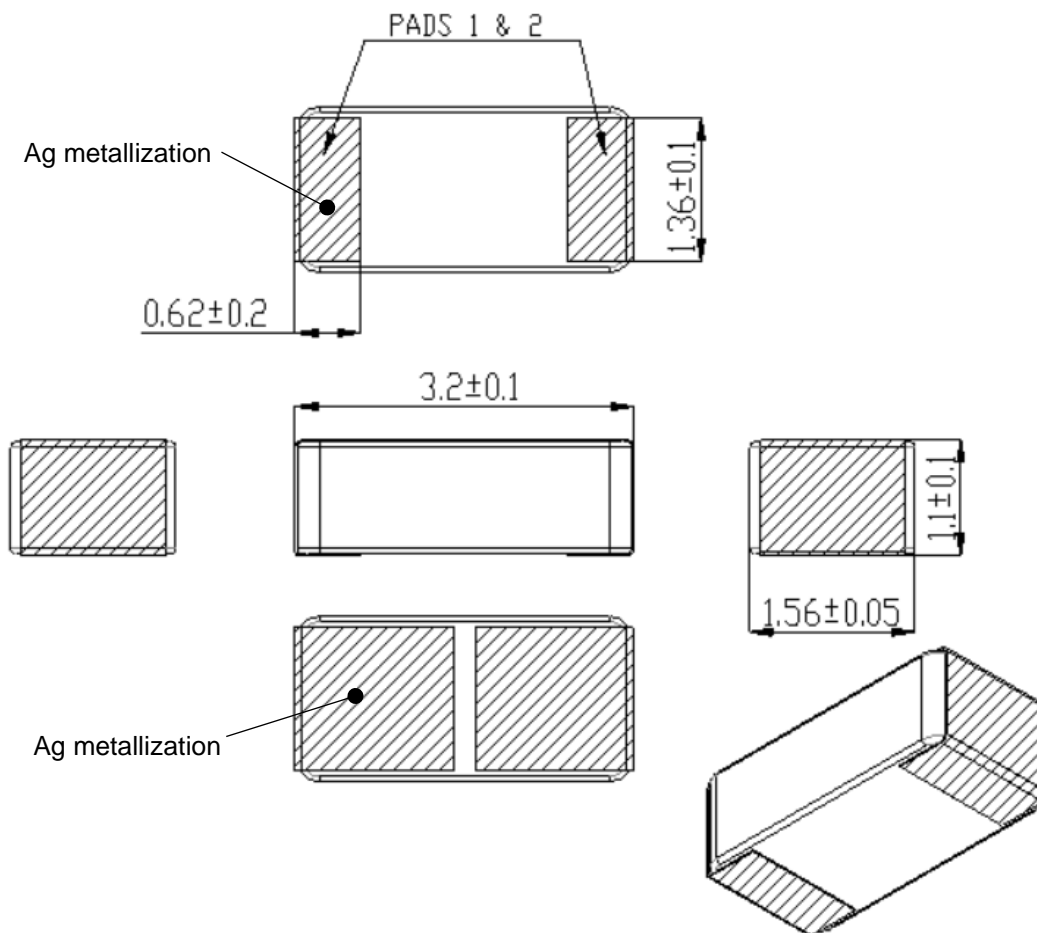
Storage

To maintain solderability of Pulse ceramic products care must be taken to control the storage and use conditions:

- Do not store or use products in a corrosive atmosphere, especially where chloride, sulphur or sulfide, alkali or acid salts exist in the air. Corrosive gases may cause oxidation of electrodes and reduce solderability
- Keep temperature and humidity stable and do not exceed the below mentioned minimum and maximum conditions:
Temperature: -10 to +30 Deg C, Humidity: below 60% RH
- Do not store the products under direct sun light.

Mechanical Drawing

W3155



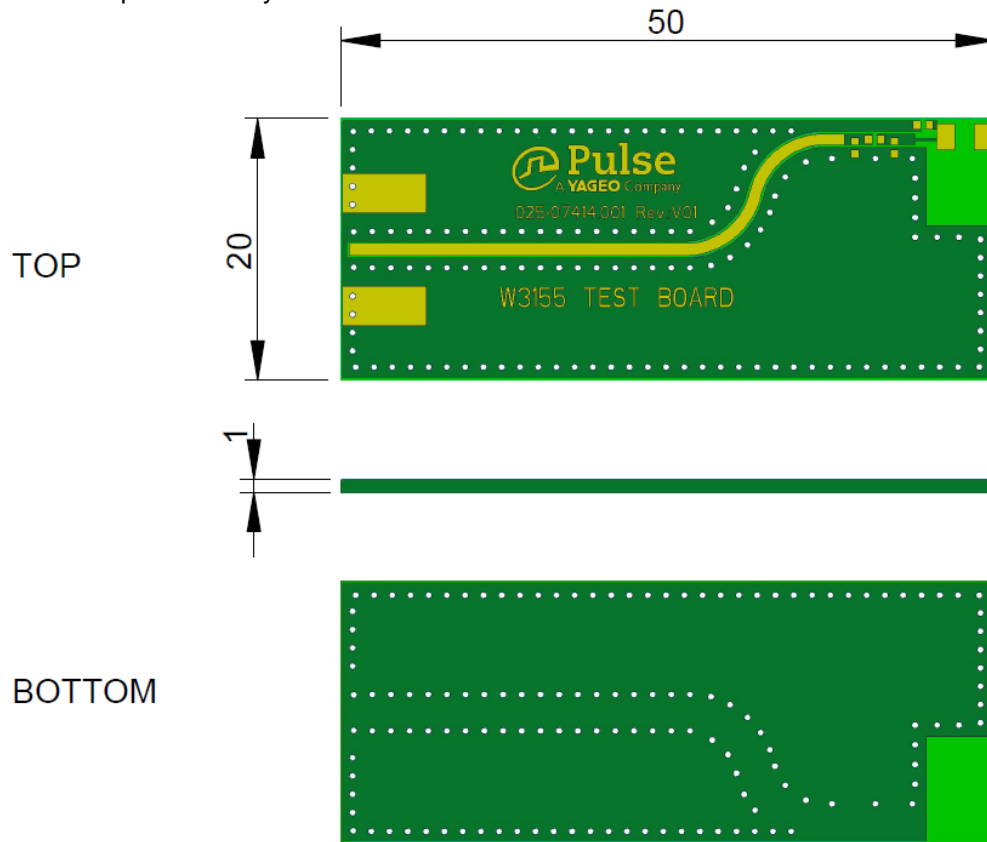
Antenna features		
No.	Terminal Name	Terminal Dimensions
1	Feed / Support	0.62x1.36mm
2	Feed / Support	0.62x1.36mm
Antenna is symmetrical, pad 1 and 2 orientation can be swapped without affecting performance.		

Dimensions: mm (inches) Unless otherwise specified, all tolerances are 0.25mm (± 0.010)

Mechanical Drawing

W3155

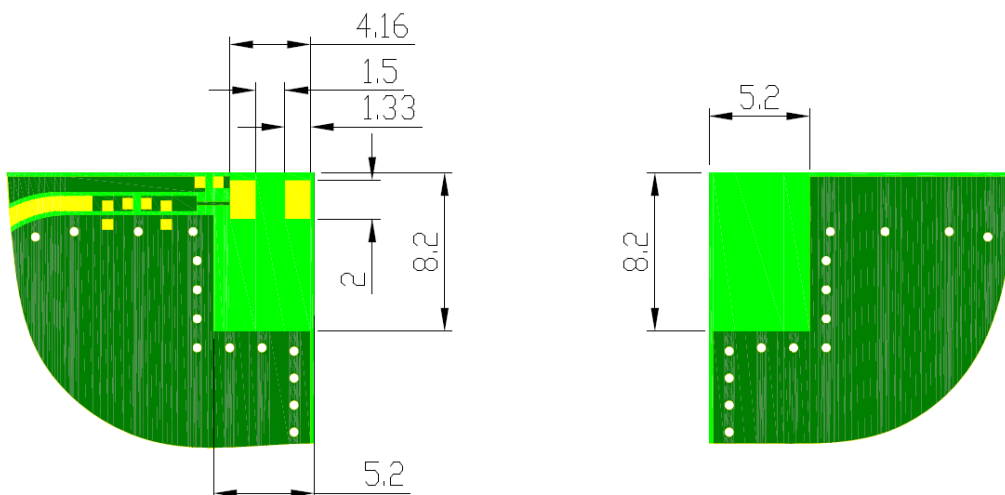
Test PCB and Antenna footprint PCB layout



Clearance area

TOP VIEW

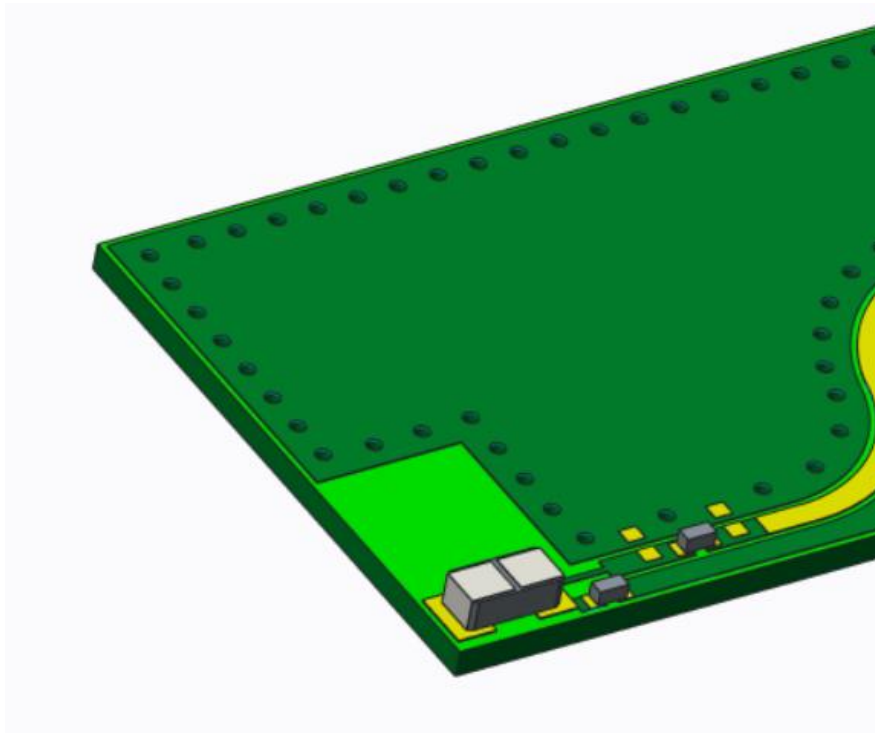
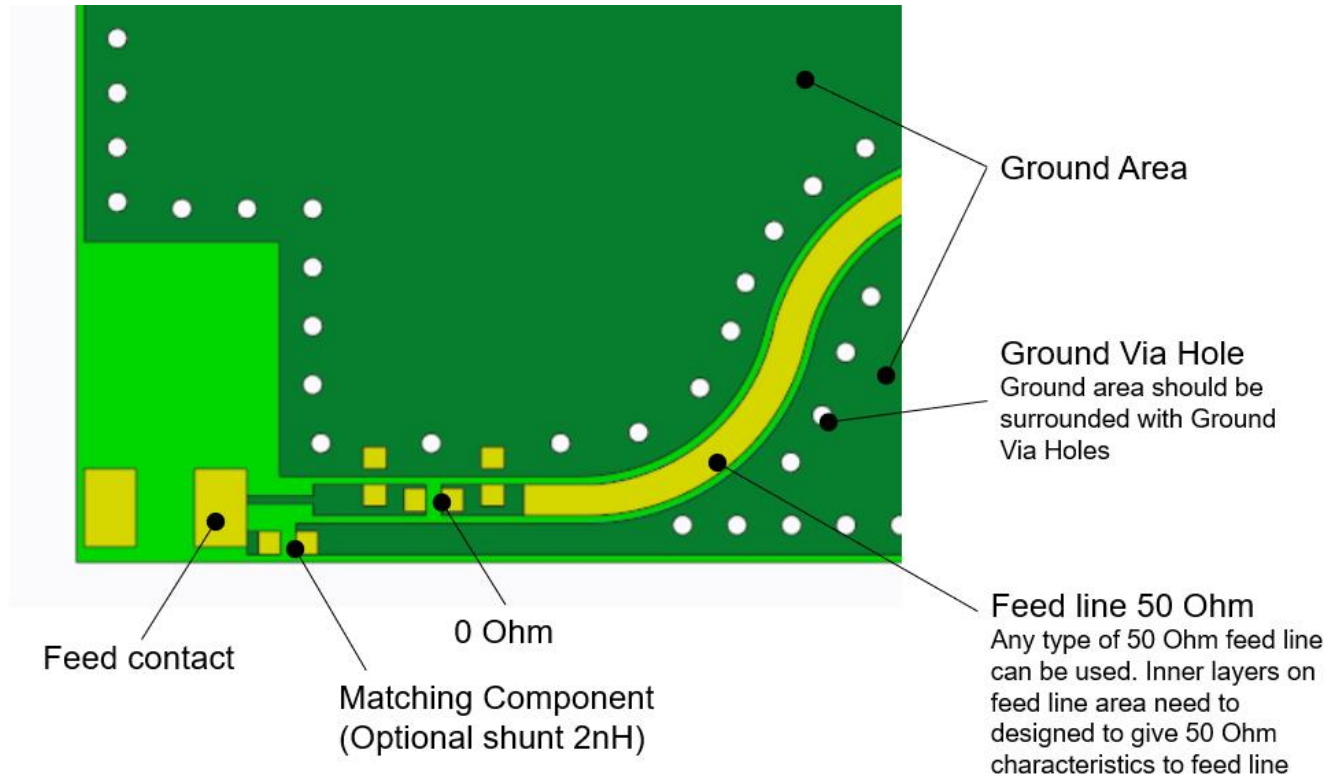
BOTTOM VIEW



Mechanical Drawing

W3155

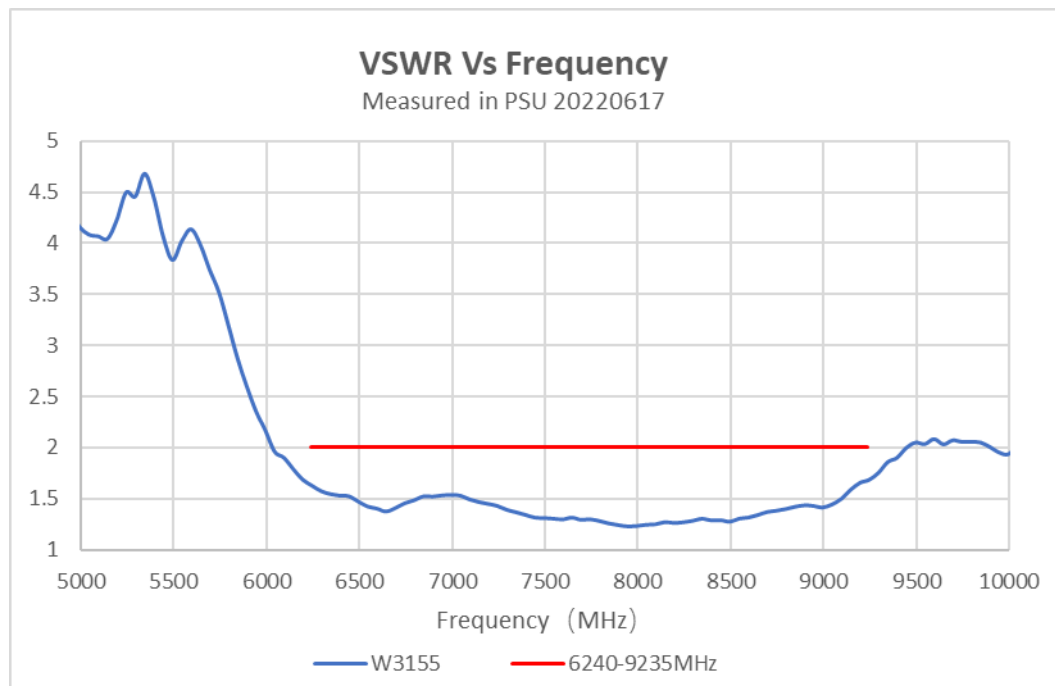
PCB Features



W3155
6240-9235MHz UWB Antenna
Chip Antenna

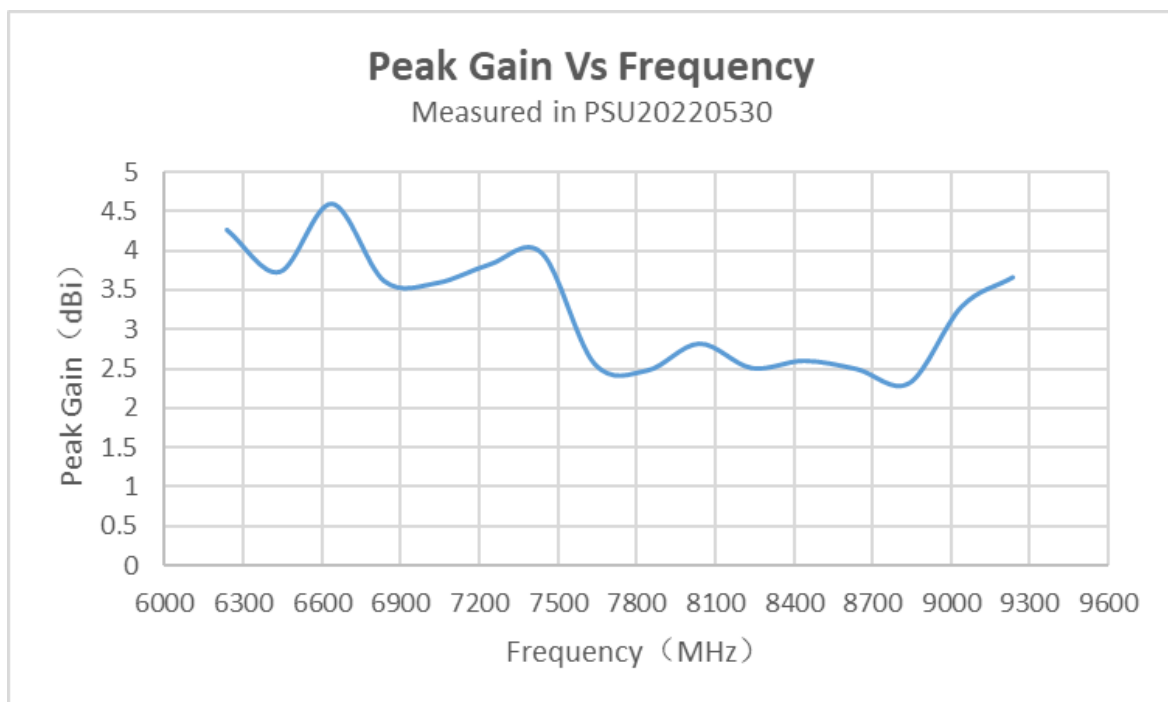
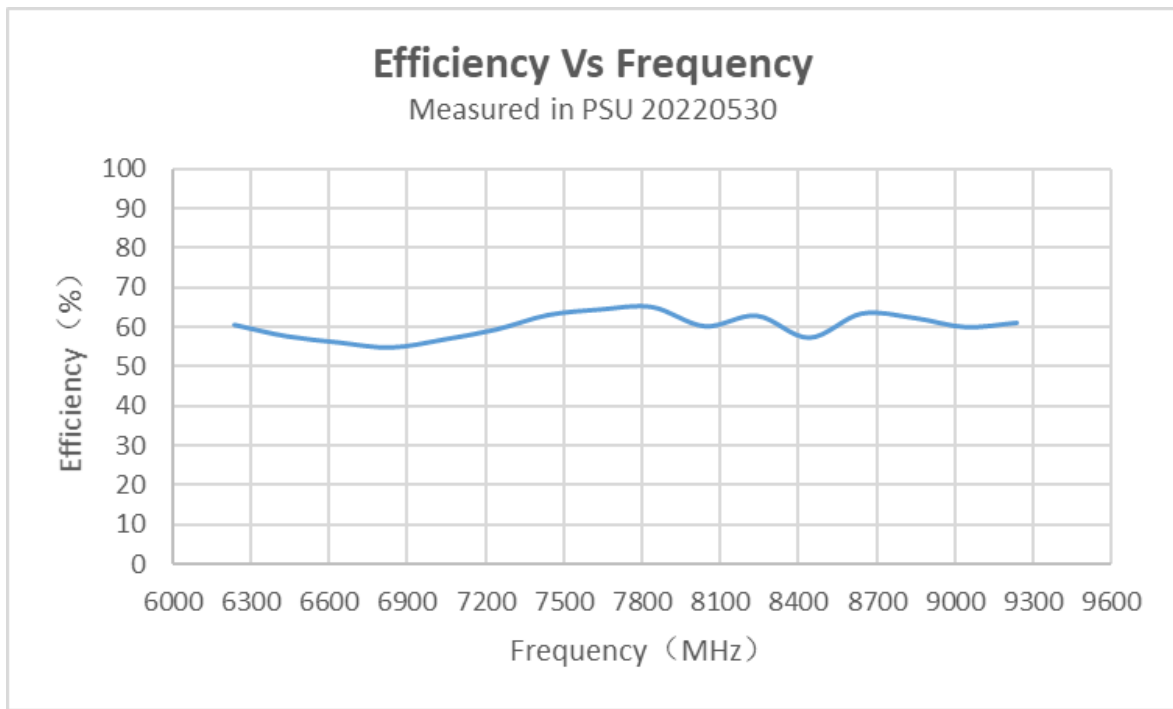
Chart

W3155



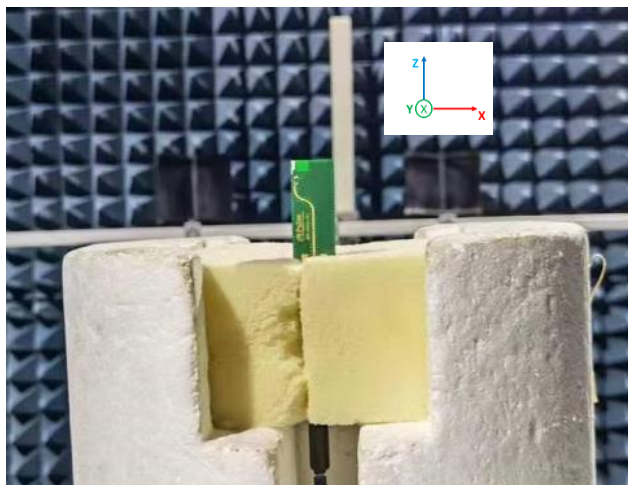
Chart

W3155

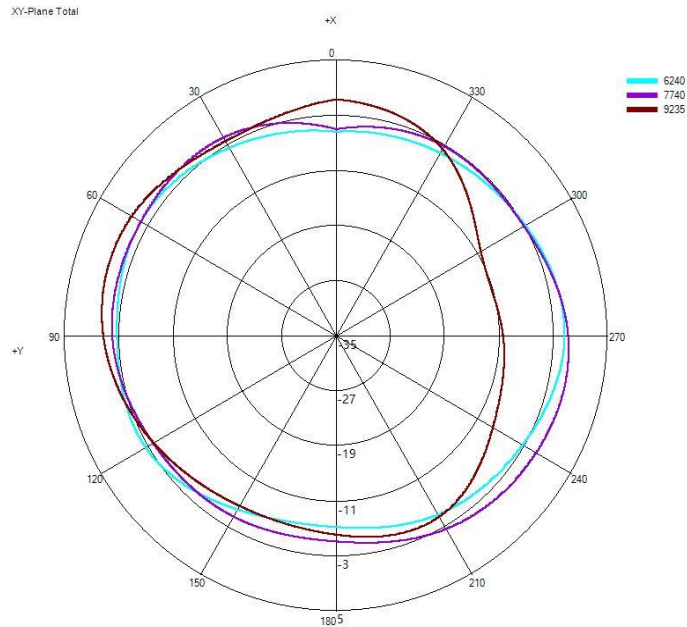


Chart

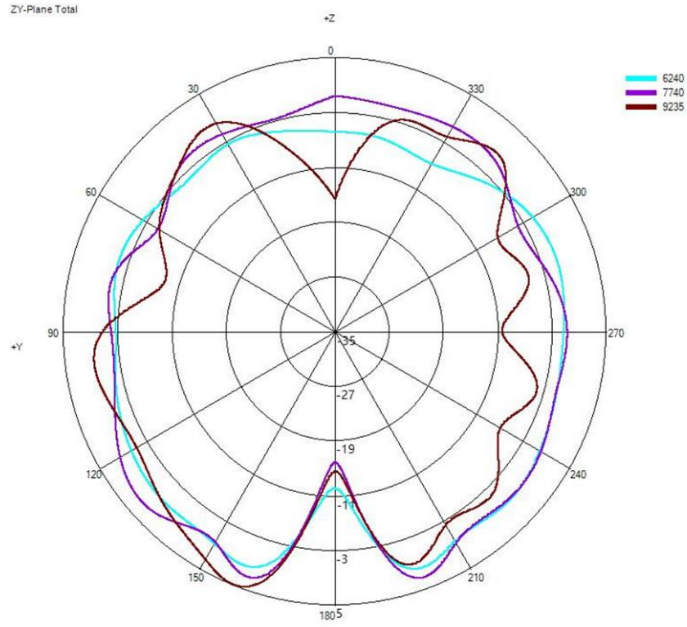
W3155



XY-Plane Total



ZY-Plane Total



Recommendation for reflow soldering process

W3155

Printing stencil thickness 0,15 - 0,25 mm is recommended for the solder paste. The maximum soldering temperature should not exceed 260°C. The temperature profile recommendations for reflow soldering process is presented in the Figures 1 and 2. The reflow profile

presented in figure 1 describes minimum reflow temperatures. The reflow profile presented in figure 2 describes maximum reflow temperatures. located at the center of the coverage area.

	Method of heat transfer	Controlled hot air convection
1	Average temperature gradient in preheating	2.5 °C/s
2	Soak time	2-3 minutes
3	Max temperature gradient in reflow	3 °C/s
4	Time above 217 °C	Max 30 sec
5	Peak temperature in reflow	230 °C for 10 seconds
6	Temperature gradient in cooling	Max -5 °C/s

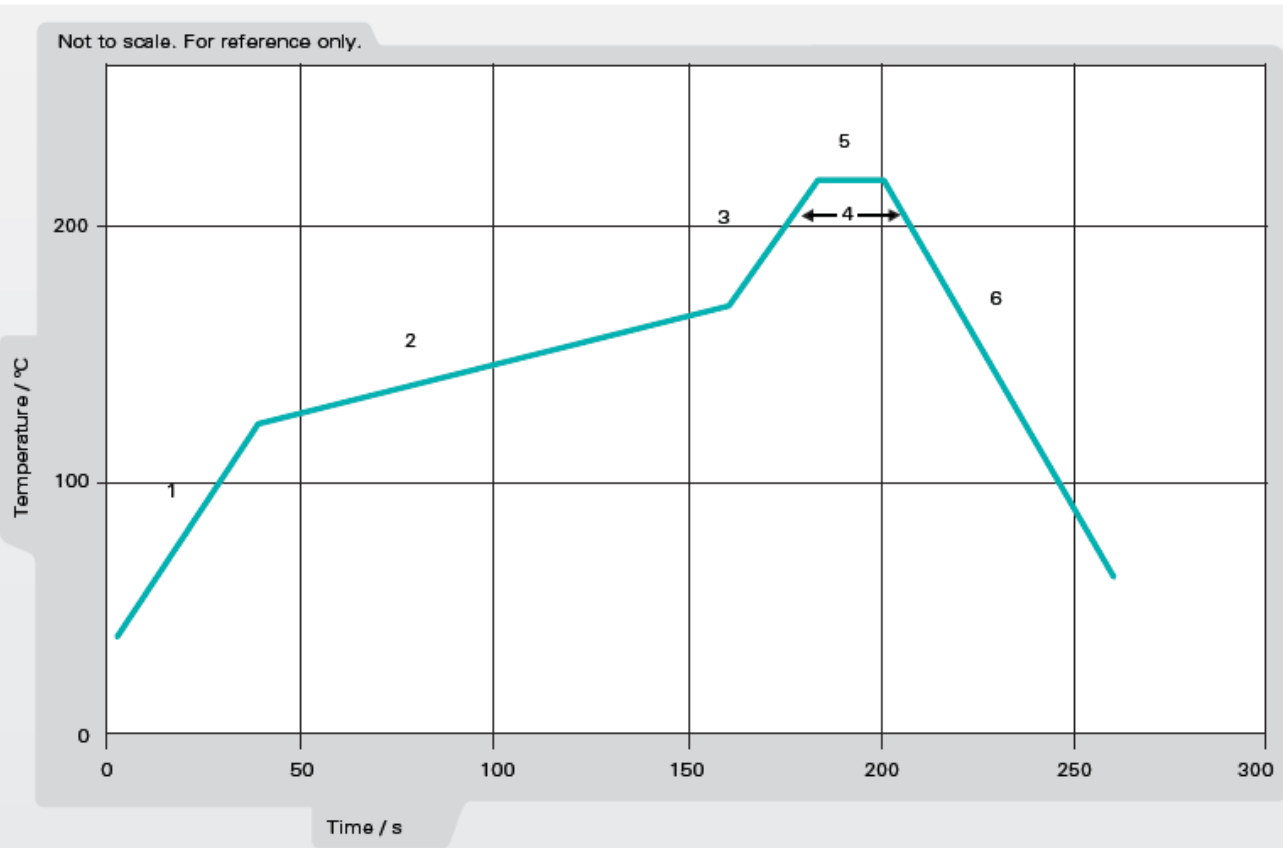


Figure 1. Minimum temperature profile recommendation for reflow soldering process

Recommendation for reflow soldering process

W3155

	Method of heat transfer	Controlled hot air convection
1	Average temperature gradient in preheating	2.5 °C/s
2	Soak time	2-3 minutes
3	Max temperature gradient in reflow	3 °C/s
4	Time above 217 °C	Max 60 sec
5	Time above 230 °C	Max 50 sec
6	Time above 250 °C	Max 10 sec
7	Peak temperature in reflow	260 °C for 5 seconds
8	Temperature gradient in cooling	Max -5 °C/s

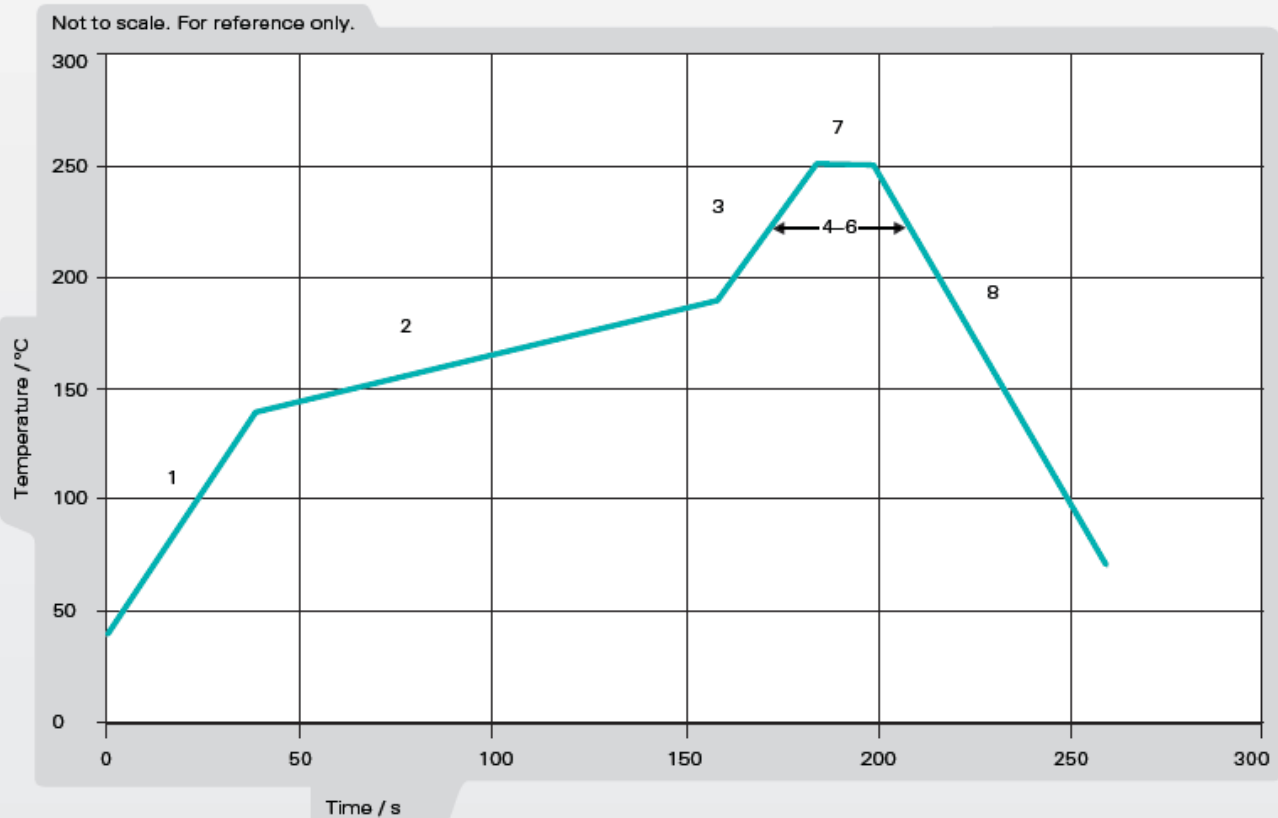
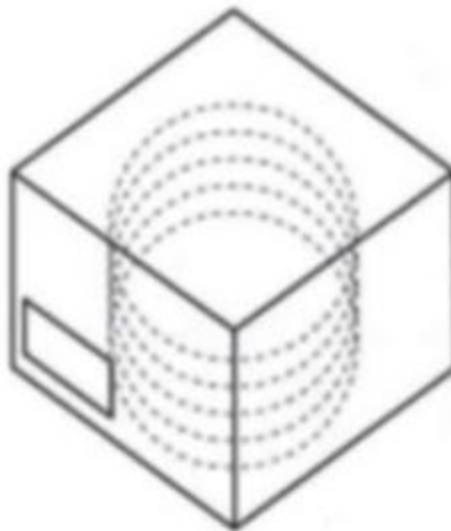
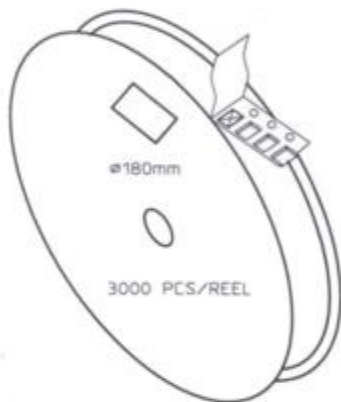


Figure 2. Maximum temperature profile recommendation for reflow soldering process

PACKAGING

W3155

3000pcs antennas per 7" reel
5pcs 7" reel per inner package box
2pcs inner box per out box
Total 30000pcs antenna per our box
Out box size: 390mmx215mmx165mm



LEVEL
1

NOT MOISTURE SENSITIVE

These Devices do not require special storage conditions provided:

1. They are maintained at conditions equal to or less than 30°C and 85% RH.
2. They are solder reflowed at a peak body temperature which does not exceed 260°C.

Note: Level 1 and body temperature defined by IPC/JEDEC J-STD-020

Notes:

1. Please contact sales for availability, lead time, and/or any special requests. Samples available upon request.

For More Information:

Americas - antennas.us@pulseelectronics.com | Europe - antennas.eu@pulseelectronics.com | Asia - antennas.as@pulseelectronics.com | Questions? +1-800-ANTENNA
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