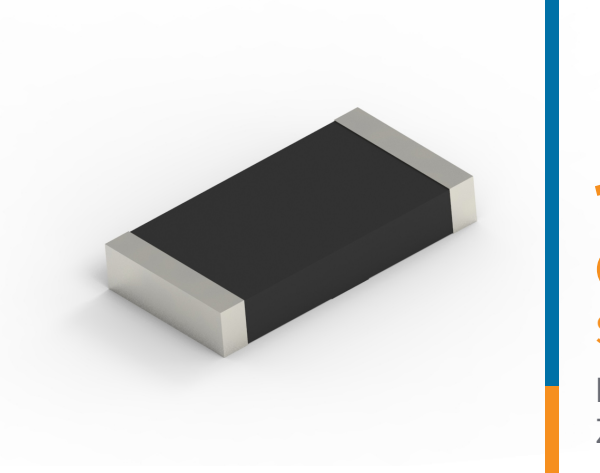


1570-1580, 2400-2500 MHz GPS/WiFi BAND ANTENNA

Standard Antenna Solutions

Includes Frequencies of GNSS, Bluetooth, ZigBee and WiFi Products

Part Number: 2195765-1

PRODUCT FACTS:

- Embedded ceramic chip antenna
- SMT assembly
- Available in tap & reel
- RoHS compliant

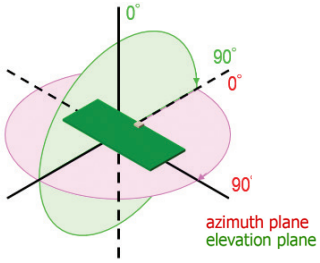
RECOMMENDATIONS:

- Minimum or no matching circuits required
- Bandwidth and performance is dependent on ground plane size. Evaluation board size is 100mm x50mm
- PCB ground is to be on top layer

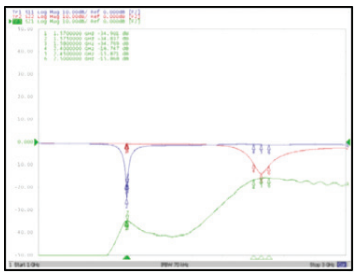
SPECIFICATIONS:

- Frequency Range: 1570-1580 MHz/2400-2500 MHz
- Peak Gain:
  – 1570-1580 MHz ≦ 0.69 dBi (Max)
  – 2400-2500 MHz ≦ 0.97 dBi (Max)
- Return Loss: <-10 dB
- Size: 3.2mm x 1.7mm x 0.5mm
- Mounting: Surface-mount technology
- Mounting Guide: See diagram on page 2
- Weight: 0.1 g
- Operating Temperature: -40° to 105°C

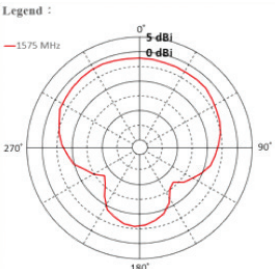
TEST ORIENTATION IN FREE SPACE:



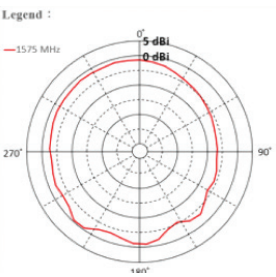
RETURN LOSS:



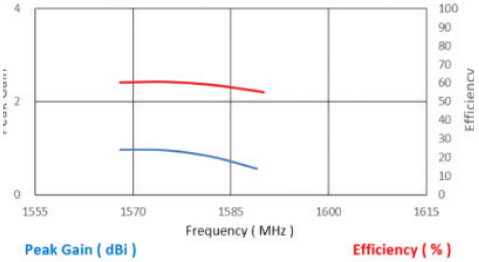
AZIMUTH:



ELEVATION:

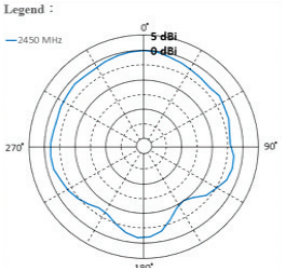


EFFICIENCY:

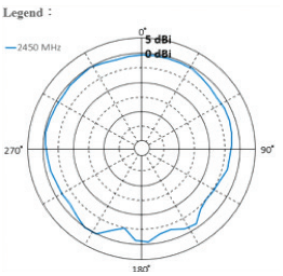


2400-2500MHz

AZIMUTH:



ELEVATION:



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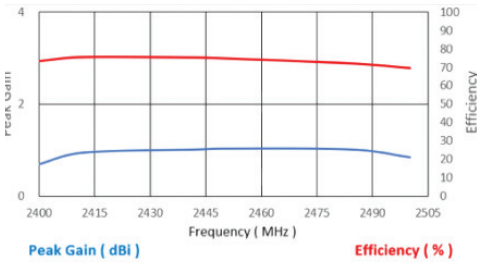
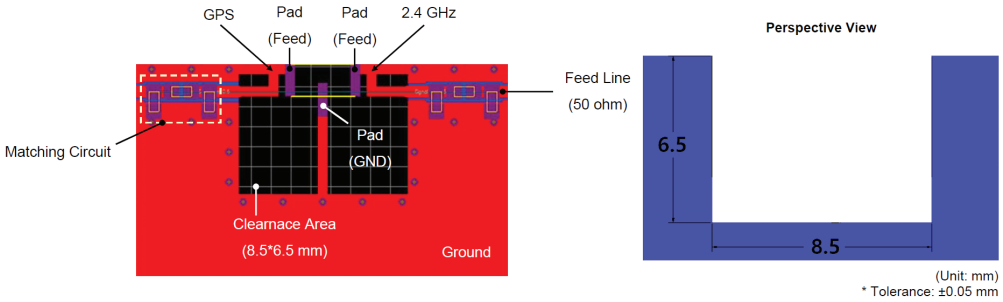
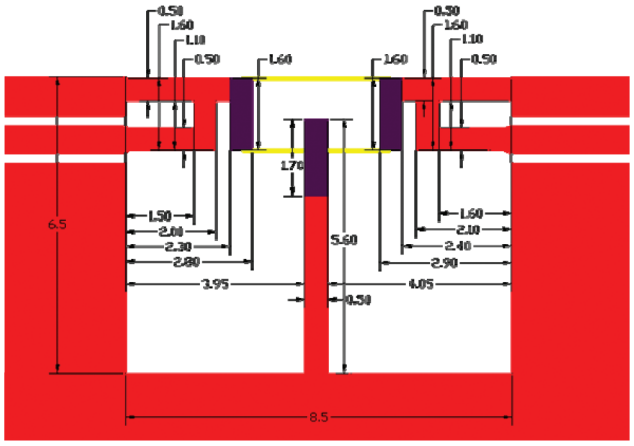


MOUNTING GUIDE:

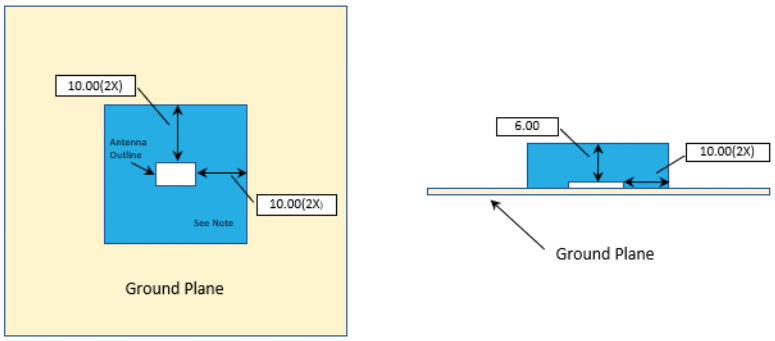
Layout



Top View



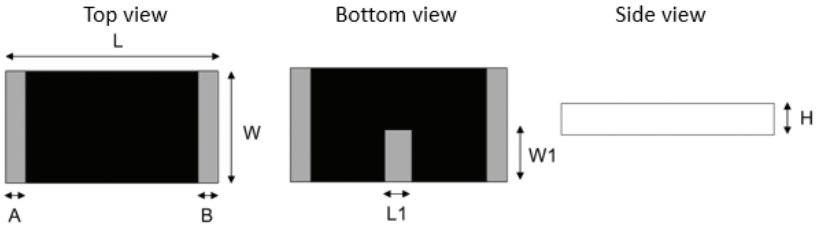
KEEP OUT AREA:



NOTES : 1. Antenna designed to be mounted on ground plane.
2. Area in blue above indicates Keep Out Area.
3. For more information please call TE.

Dimensions : mm
Diagram is not to scale

APPROXIMATE DIMENSIONS:



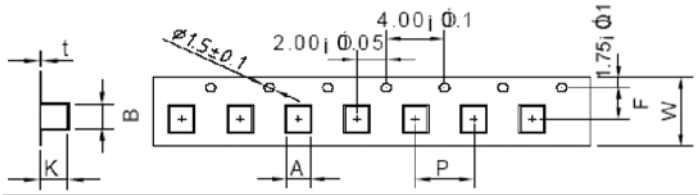
L	3.20 ± 0.30
W	1.70 ± 0.20
H	0.50 ± 0.10
A	0.30 ± 0.15
B	0.30 ± 0.15
L1	0.47 ± 0.20
W1	0.70 ± 0.20

(Unit: mm)

TAPING PACKAGE AND LABEL MARKING

(1) Quantity: 4000pcs/reel, T (Thickness of chip) ≦1.2

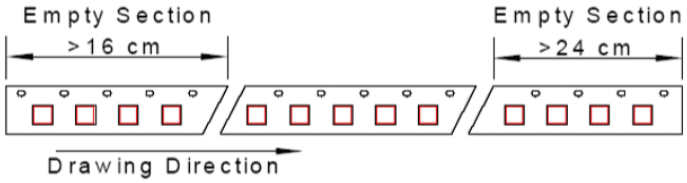
(2) Plastic tape



W	A	B	K	t	F	P
8±0.1	1.9~2.1	3.50~3.60	Max. 1.40	0.22±0.05	3.50±0.1	4.00±0.1

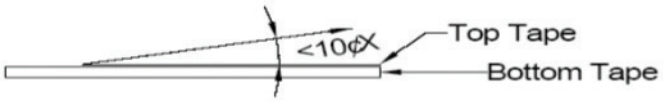
(Unit: mm)

(3) Tape Packing



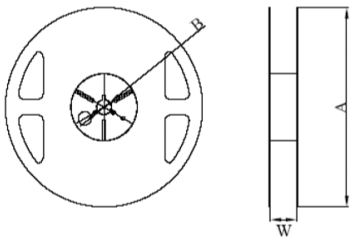
(4) Cover Tape Reel Off Force

5g · f≦Peel-Off Force≦70g · f



(5) Reel Dimensions

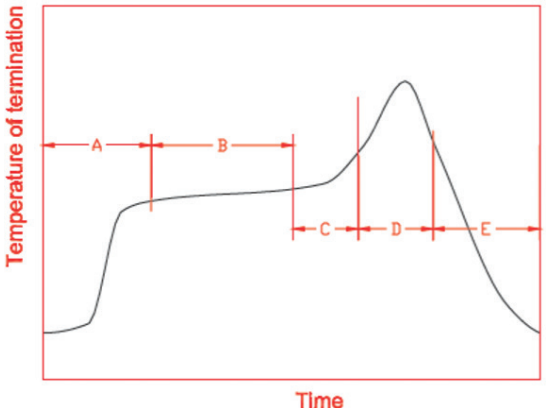
Reel Material: Polystyrene



W	A	B
8±0.5	178±0.5	13±0.5
12±0.5	178±0.5	13±0.5

(Unit: mm)

RECOMMENDED REFLOW SOLDERING



A	1st rising temperature	The normal to Preheating temperature	30s to 60s
B	Preheating	140℃ to 160℃	60s to 120s
C	2nd rising temperature	Preheating to 200℃	20s to 40s
D	Main heating	if 220℃	50s～60s
		if 230℃	40s～50s
		if 240℃	30s～40s
		if 250℃	20s～40s
		if 260℃	20s～40s
E	Regular cooling	200℃ to 100℃	1℃/s ～ 4℃/s

(1) Soldering gun procedure

Note the following, in case of using solder gun for replacement

(a) The tip temperature must be less than 350°C for a period within 3 seconds by using soldering gun under 30 W

(b) The soldering gun tip shall not touch this product directly

(2) Soldering volume

Note that excess soldering volume will easily crack the body of this product

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