

Description: Bluetooth, WiFi Antenna

PART NUMBER: W3092

Series: The Blue Dot



Features:

- Chip Antenna
- Frequency:2400MHz ~ 2483MHz
- Low profile
 2.0mm(Length) x 1.2mm(Width)
 x 0.55mm(Thickness)

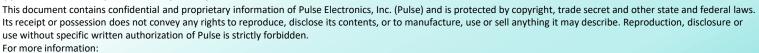
Applications:

- WLAN
- 802.11b/g
- Bluetooth
- Zigbee, ISM 2.4GHz

All dimensions are in mm / inches

Issue: 2049

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION



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ELECTRICAL SPECIFICATIONS

Frequency	2400-2483	MHz	
Nominal Impedance	50	Ω	
VSWR	3	max	
Gain (Typ.)	0.89	dBi	
Efficiency(Typ.)	50	%	
Polarization	Lir	Linear	



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MECHANICAL SPECIFICATIONS

Weight 0.005 g

Size 2.0x1.2x0.55 mm

MSL Level 1

ENVIRONMENTAL SPECIFICATIONS

Operating temperature -40/+105 ° C

High temperature resistance 150 ° C, 1000 hours

Low temperature resistance -40 ° C, 1000 hours

Humidity 85%R.H. 85±5 ° C, 1000 cycles

Soldering heat resistance 260 ° C 10s

Thermal shock -40/+105 ° C

Storage condition

At warehouse 0-30 °C, <60%R.H., shoule be used<1 year

On board -40 ~85 ° C, <85%R.H



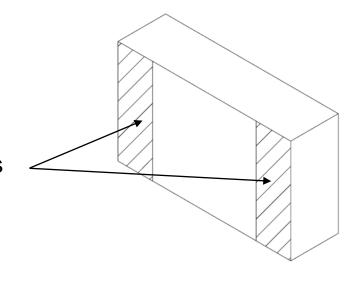
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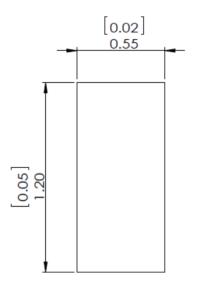
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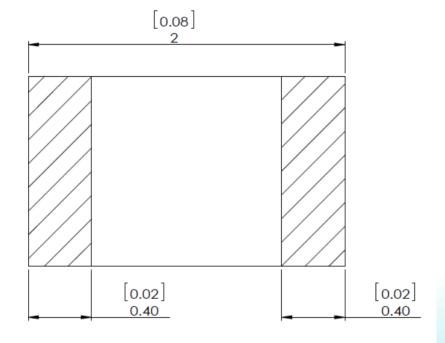
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MECHANICAL DRAWING

Pad for SMT process











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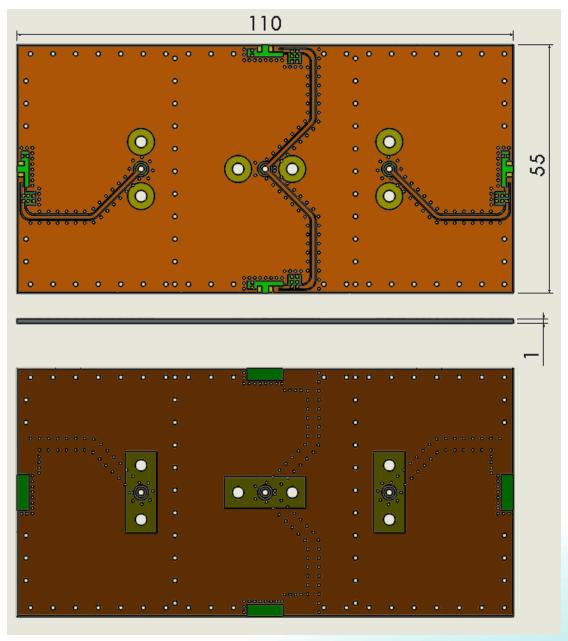
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OTHER SPECIFICATIONS

Recommended PCB layout(Unit:mm)

PCB size(L X W X T): 110 X 55 X 1mm







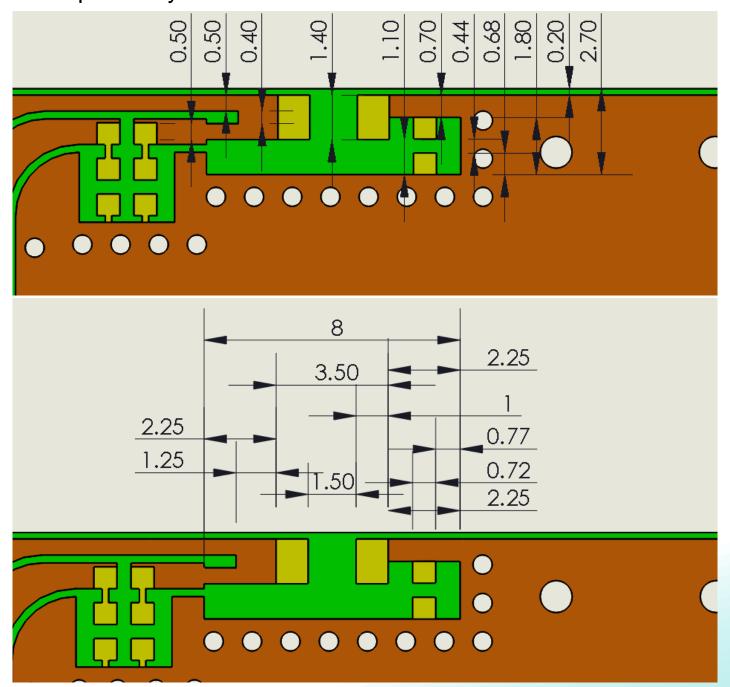
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OTHER SPECIFICATIONS

PCB top side layout



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RŏHS



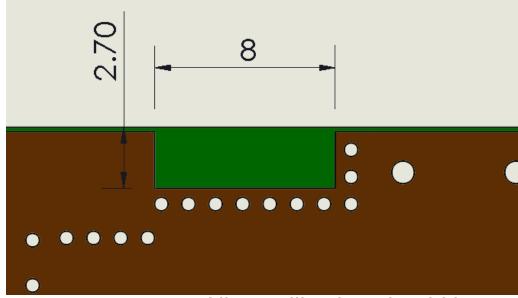
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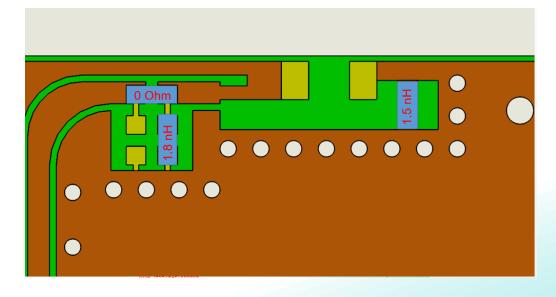
OTHER SPECIFICATIONS

PCB bottom side layout



*Clearance 8mm × 2.7mm : All metallization should be removed from all PCB layers.

Recommended matching circuit







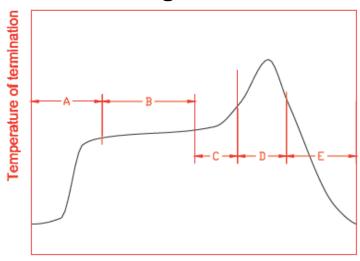
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OTHER SPECIFICATIONS

Recommended reflow soldering



Time

Α	1 st rising temperature	The normal to Preheating temperature	30s to 60s
В	Preheating	140°C to 160°C	60s to 120s
С	2 nd rising temperature	Preheating to 200°C	20s to 40s
D		if 220°C	50s∼60s
		if 230°C	40s∼50s
	Main heating	if 240°C	30s~40s
		if 250°C	20s~40s
		if 260°C	20s~40s
Ε	Regular cooling	200°C to 100°C	1°C/s ~ 4°C/s

^{*}reference: J-STD-020C

(1) Soldering gun procedure

Note the follows, in case of using solder gun for replacement.

- (a) The tip temperature must be less than 350°C for the 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 of soldering volume will easily get crack the body of this product.

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ROHS



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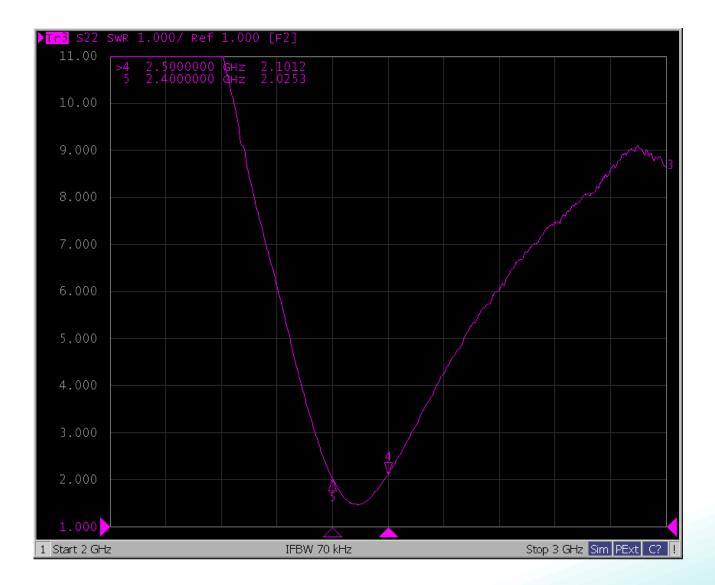
TECHNICAL DATA SHEET

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CHARTS

VSWR







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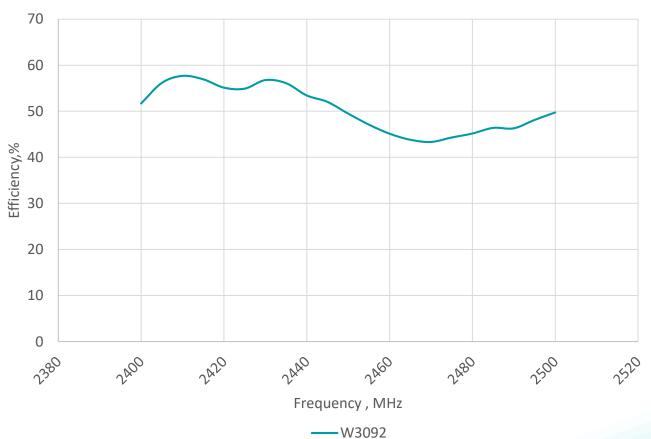
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CHARTS

Efficiency

Efficiency vs Frequency measured with demo board





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TECHNICAL DATA SHEET

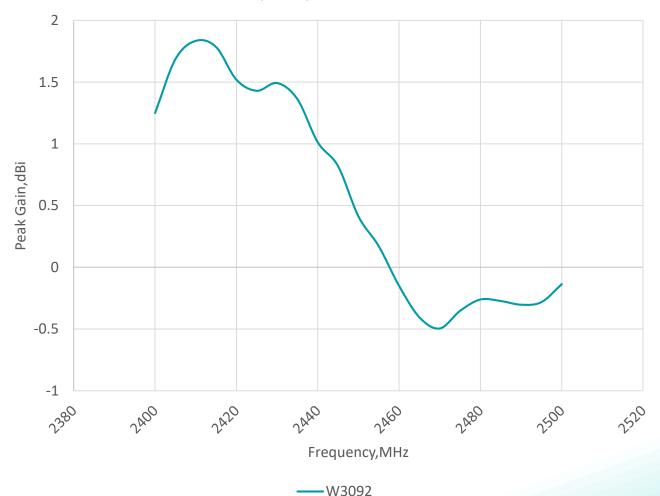
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CHARTS

Peak Gain

Peak Gain vs Frequency measured with demo board





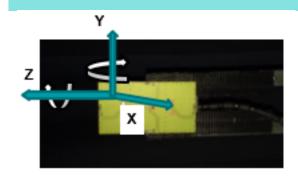


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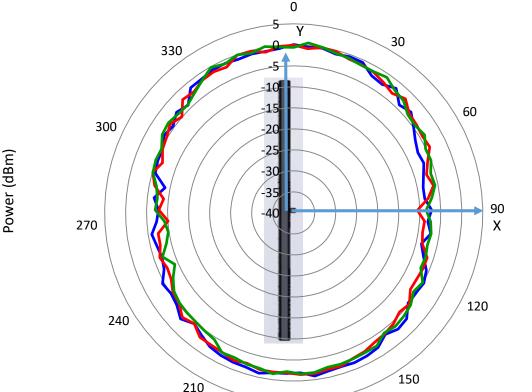
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CHARTS



Radiation pattern XY Plane



2400MHz

Avg (dBi) = -4.07 Peak (dBi) = -2.05 Avg -3 (deg) = 285

2450MHz

Avg (dBi) = -3.89 Peak (dBi) = -1.39 Avg -3 (deg) = 265

2480MHz

Avg (dBi) = -3.32 Peak (dBi) = -1.32 Avg -3 (deg) = 265

Phi Angle (°)

180

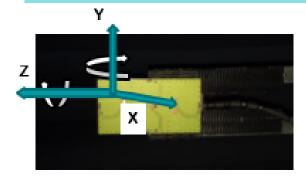


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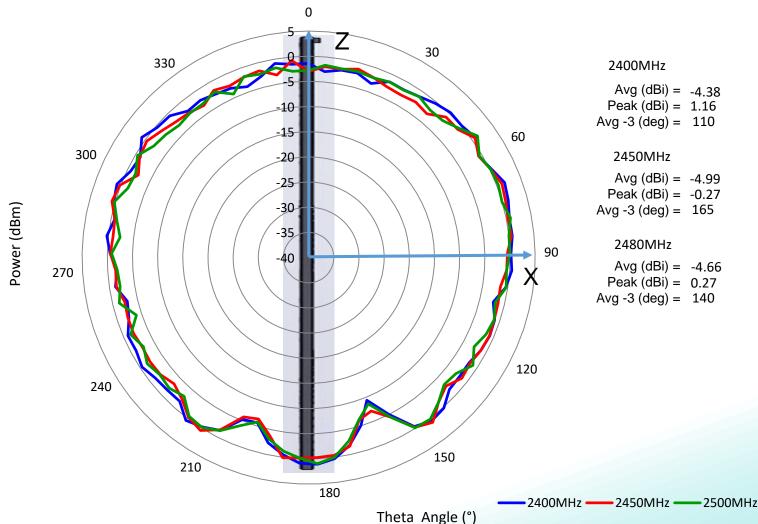
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CHARTS



Radiation pattern

ZX Plane





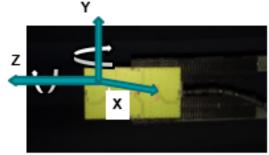


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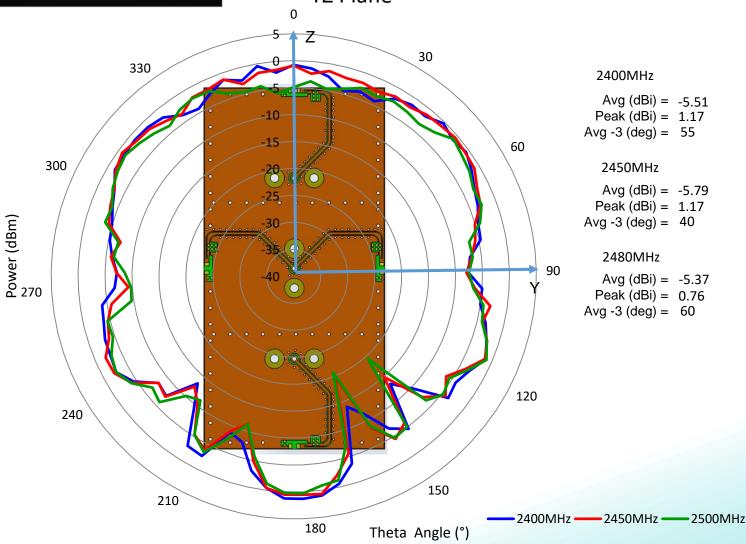
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Radiation pattern









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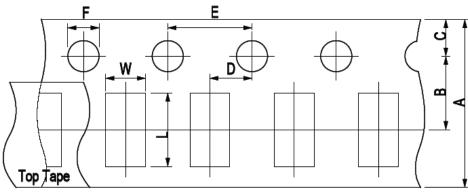
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PACKAGING

Taping Package and Label Marking: (unit: mm)

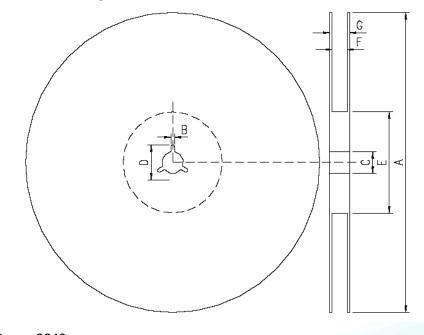
(1) Quantity/Reel: 5000pcs/Reel

(2) Carrier tape dimensions



Type	Α	В	С	D	Е	F	L	W
ACA2012	8.00±	3.50±	1.75±	2.00±	4.00±	1.50±	2.30±	1.55±
	0.30	0.05	0.10	0.05	0.10	0.10	0.10	0.10

(3) Taping reel dimensions



Α	178.0±2.0
В	2.0±0.5
С	13.0±0.5
D	21.0±0.8
Ε	62.0±1.5
F	9.0±0.5
G	13.0±1.0

单击下面可查看定价,库存,交付和生命周期等信息

>>Pulse(普思)