

Description: 824-2170MHz SMD Antenna

PART NUMBER: W3544X

Series: Domino



Features:

- Frequency
 - 824-960/1710-2170MHz
- Impedance 50 Ohm
- Efficiency average
 - 40%/55% for W3544A
 - 55%/57% for W3544B
- Size 7.65 x 26 x 3 mm
- SMD Compliant
- A and B variants for different mounting positions on PCB

Applications:

- 2G/3G Cellular antenna
- GPRS
- Nb-loT, LTE Cat M1

All dimensions are in mm

Issue: 2045

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 824-960/1710-2170MHz

Nominal Impedance 50Ω

Return Loss <-3dB/-4dB for W3544A

<-4dB/-4dB for W3544B

Average Radiation Efficiency 40%/55% for W3544A

55%/57% for W3544B

Average Peak Gain -0.9dBi/1.5dBi for W3544A

1.9dBi/1dBi for W3544B

Maximum power input 3W

MECHANICAL SPECIFICATIONS

Overall Length 7.65 x 26 x 3 mm

Weight 1.11 g

Antenna Color Black

Mounting SMD

Moisture Sensitivity Level MSL3

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature $-45 \sim 85^{\circ}$ C Storage Temperature $-45 \sim 85^{\circ}$ C

RoHS Compliant Yes

(*) All RF parameters measured on Pulse reference test PCB

Issue: 2045

ROHS

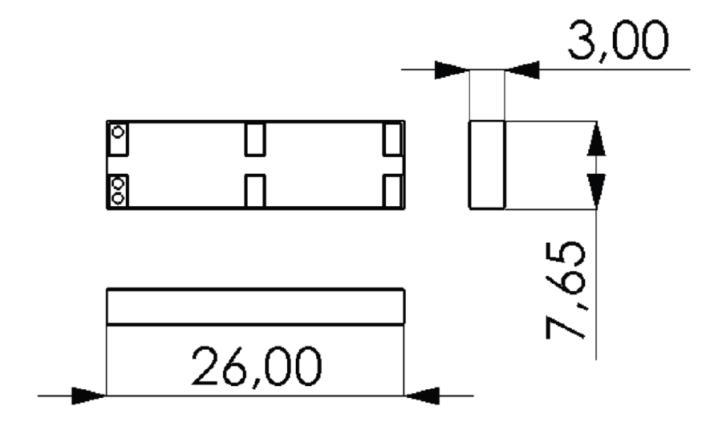


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MECHANICAL DRAWING





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Recommendation for reflow soldering process

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					

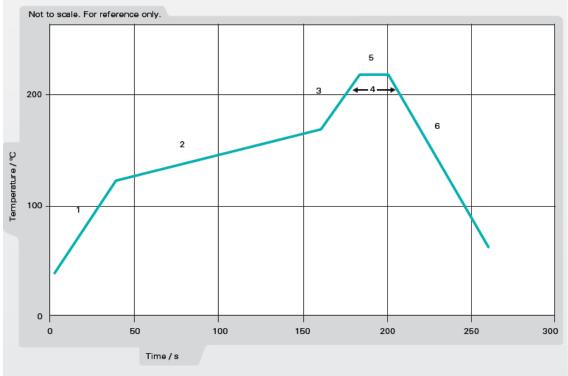


Figure 1. Minimum temperature profile recommendation for reflow soldering process



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Recommendation for reflow soldering process

	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						

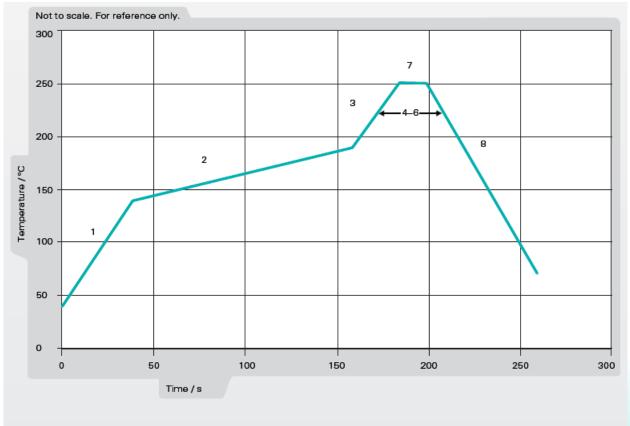


Figure 2. Maximum temperature profile recommendation for reflow soldering process



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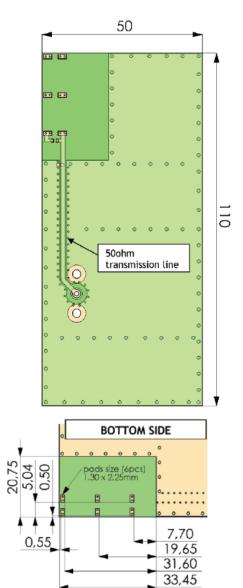
TEST SETUP

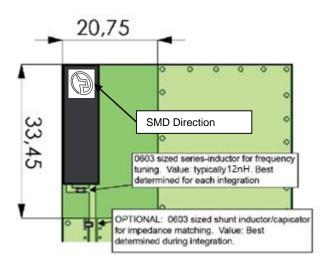
Test Setup for Electrical Measurements

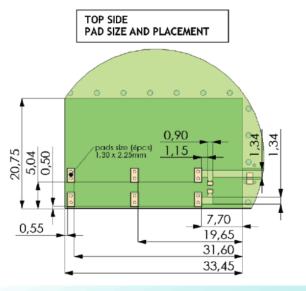
Recommended test board layout for electrical characteristic measurement. Test board outline size 110 mm x 50 mm. Ground cleared under antenna.

NOTE: All measurements are in mm.

W3544A - Antenna positioned vertically on PWB corner







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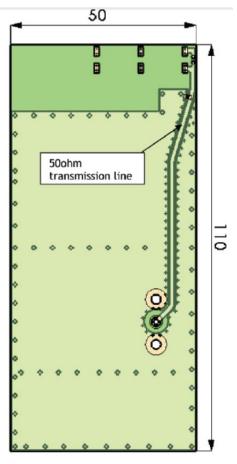


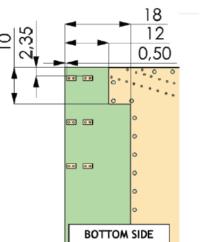
TECHNICAL DATA SHEET

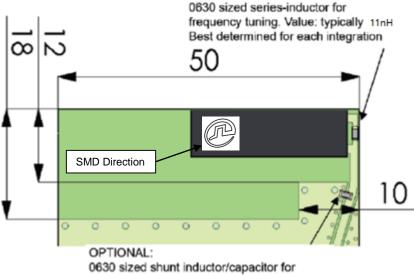
Description: 824-2170MHz SMD Antenna

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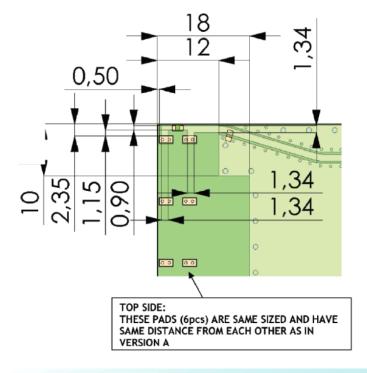
W3544B - Antenna positioned horizontally on PWB corner







impedance matching. Value: best determined during integration



Issue: 2045

RóHS



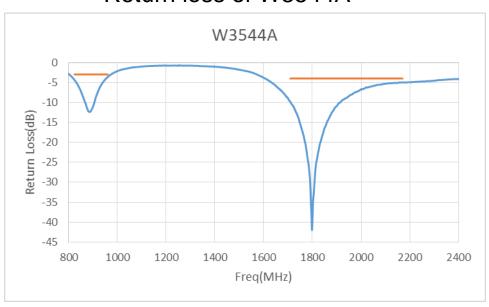


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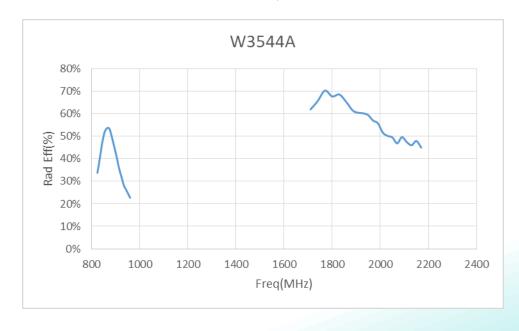
PART NUMBER: W3544X

CHARTS

Return loss of W3544A



Radiation Efficiency of W3544A





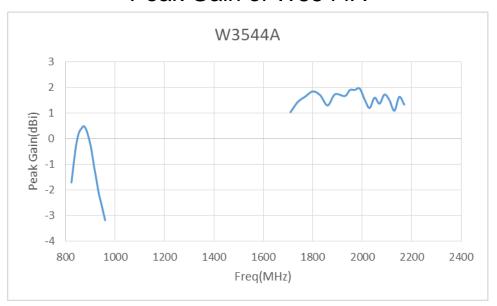
Description: 824-2170MHz SMD Antenna

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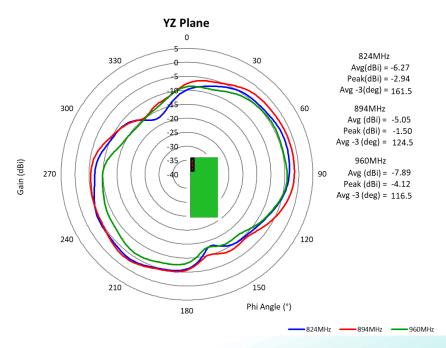
Series: Domino

CHARTS

Peak Gain of W3544A



Low band Radiation pattern at Vertical plane, front view of W3544A



Issue: 2045

ROHS

9



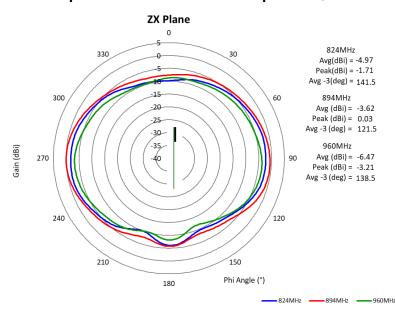


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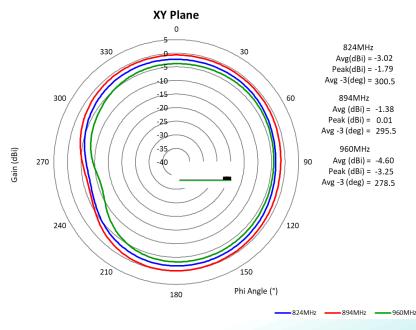
PART NUMBER: W3544X

CHARTS

Low band Radiation pattern at Vertical plane, side view of W3544A



Low band Radiation pattern at horizontal plane of W3544A





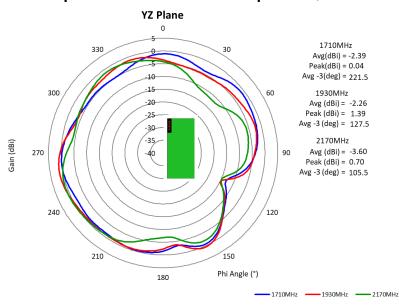


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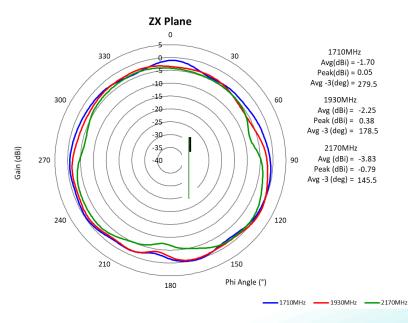
PART NUMBER: W3544X

CHARTS

High band Radiation pattern at Vertical plane, front view of W3544A



High band Radiation pattern at Vertical plane, side view of W3544A





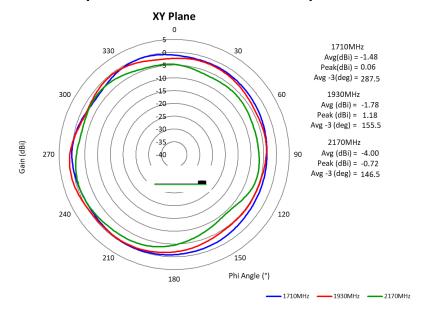
Description: 824-2170MHz SMD Antenna

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CHARTS

High band Radiation pattern at Horizontal plane of W3544A







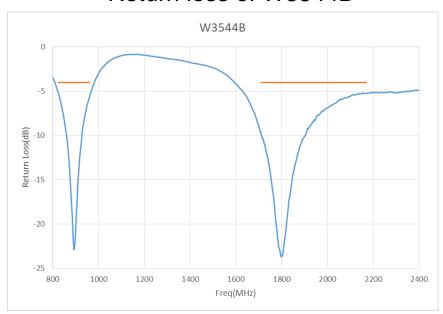
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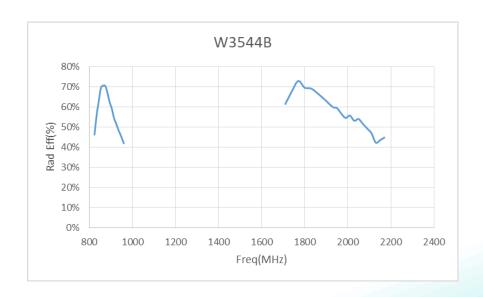
Series: Domino

CHARTS

Return loss of W3544B



Radiation Efficiency of W3544B





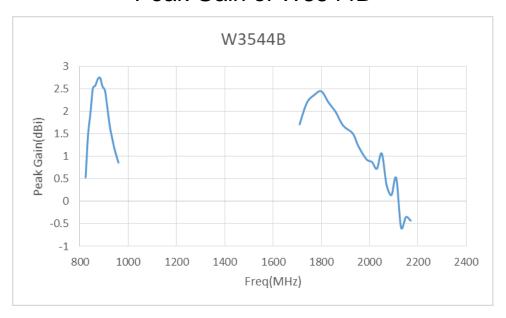
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PART NUMBER: W3544X

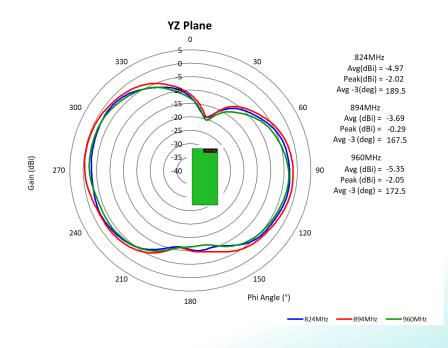
Series: Domino

CHARTS

Peak Gain of W3544B



Low band Radiation pattern at Vertical plane, front view of W3544B





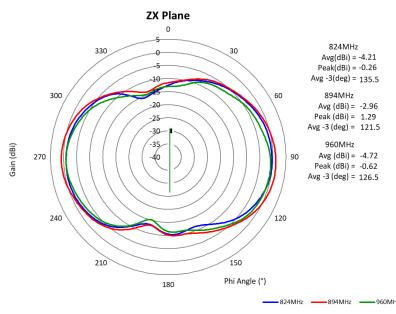


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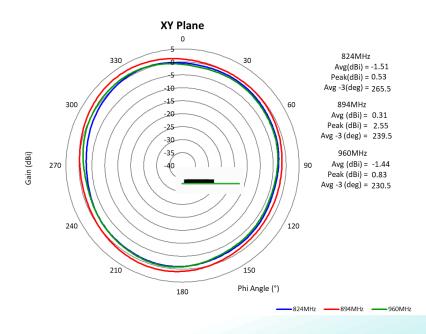
PART NUMBER: W3544X

CHARTS

Low band Radiation pattern at Vertical plane, side view of W3544B



Low band Radiation pattern at horizontal plane of W3544B





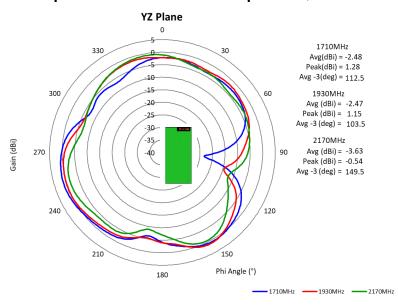


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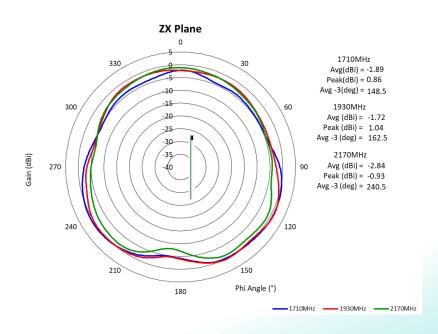
PART NUMBER: W3544X

CHARTS

High band Radiation pattern at Vertical plane, front view of W3544B



High band Radiation pattern at Vertical plane, side view of W3544B





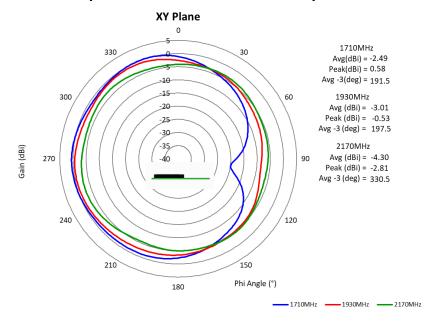
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PART NUMBER: W3544X

Series: Domino

CHARTS

High band Radiation pattern at Horizontal plane of W3544B





Description: 824-2170MHz SMD Antenna

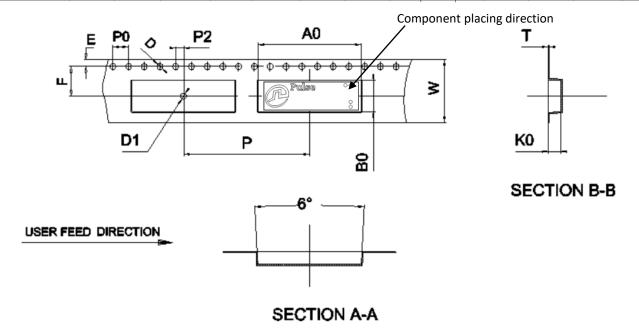
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PACKAGING

140pcs Antennas Per 1pcs 7" Tape & Reel 10 pcs 7" Tape & Reel (total 1,400 pcs Antennas) per 1 box

ITEM	W	A0	В0	K0	Р	F	Е	D	D1	P0	P2	t	7	"
DIM	16.0	26.7	8.35	3.3	32.0	7.5	1.75	1.50	1.50	4.00	2.00	0.3	LENGTH / REEL	UNITS / REEL
TOLE	+0.30 -0.30	+0.10 -0.10	+0.10 -0.10	+0.10 -0.10	+0.10 -0.10	+0.10 -0.10	+0.10 -0.10	+0.10 -0.00	+0.10 -0.00	+0.10 -0.10	+0.10 -0.10	+0.05 -0.05	4.7M/R	140PCS



According to MSL3 packing requirement, MBB-Moisture Barrel Bag, Desiccant, HIC-Humidity Indicator Card, MSID Label, Caution Label are required.







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ASSEMBLY

Part Number	Positioning				
W3544A	Vertically mounted at board edge				
W3544B	Horizontally mounted at board edge				

单击下面可查看定价,库存,交付和生命周期等信息

>>Pulse(普思)