PulseLARSEN Antennas

TECHNICAL DATA SHEET

Description: 868MHz PCB SMT Antenna

Series: Domino

PART NUMBER: W3329

Features:

- 868MHz ISM antenna
- Size 21.85 x 5 x 3 mm
- Efficiency 60%
- Nominal impedance 50 Ω
- Fully SMD and Reflow/IR/Wave- soldering compatible

Applications:

- 868MHz radios
- M2M
- IoT
- SigFox
- LoRa

All dimensions are in mm / inches

Issue: 1905

RoHS COMPLIANT

For more information:

Pulse Worldwide Headquarters
15255 Innovation Drive #100
San Diego, CA 92128
USA
Tel:1-858-674-8100

Pulse/Larsen Antennas
18110 SE 34th St Bldg 2 Suite 250
Vancouver, WA 98683
USA
Tel: 1-360-944-7551

Europe Headquarters
Pulse GmbH & Do, KG
Zeppelinstrasse 15
Herrenberg, Germany
Tel: 49 7032 7806 0

Pulse (Suzhou) Wireless Products Co, Inc.
99 Huo Ju Road(#29 Bldg,4th Phase
Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

PulseLARSEN Antennas

TECHNICAL DATA SHEET

Description: 868MHz PCB SMT Antenna

Series: Domino

PART NUMBER: W3329

ELECTRICAL SPECIFICATIONS

Frequency	868 MHz
Nominal Impedance	50Ω
Return loss	-10 dB
Total Efficiency	60 %
Peak Gain	0.17 dBi
Maximum power input	5 W

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

RoHS COMPLIANT

PulseLARSEN Antennas

TECHNICAL DATA SHEET

Description: 868MHz PCB SMT Antenna

Series: Domino

PART NUMBER: W3329

MECHANICAL SPECIFICATIONS

Color	Black
Size(L X W X T)	21.85 x 5 x 3 mm
Weight	1.3 g
Fixing system	SMD
MSL level	3

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-40/+85 ° C
Temperature	-40/+85 ° C
Humidity	93% RH @ 30° C 24 hours
Drop test	1 m

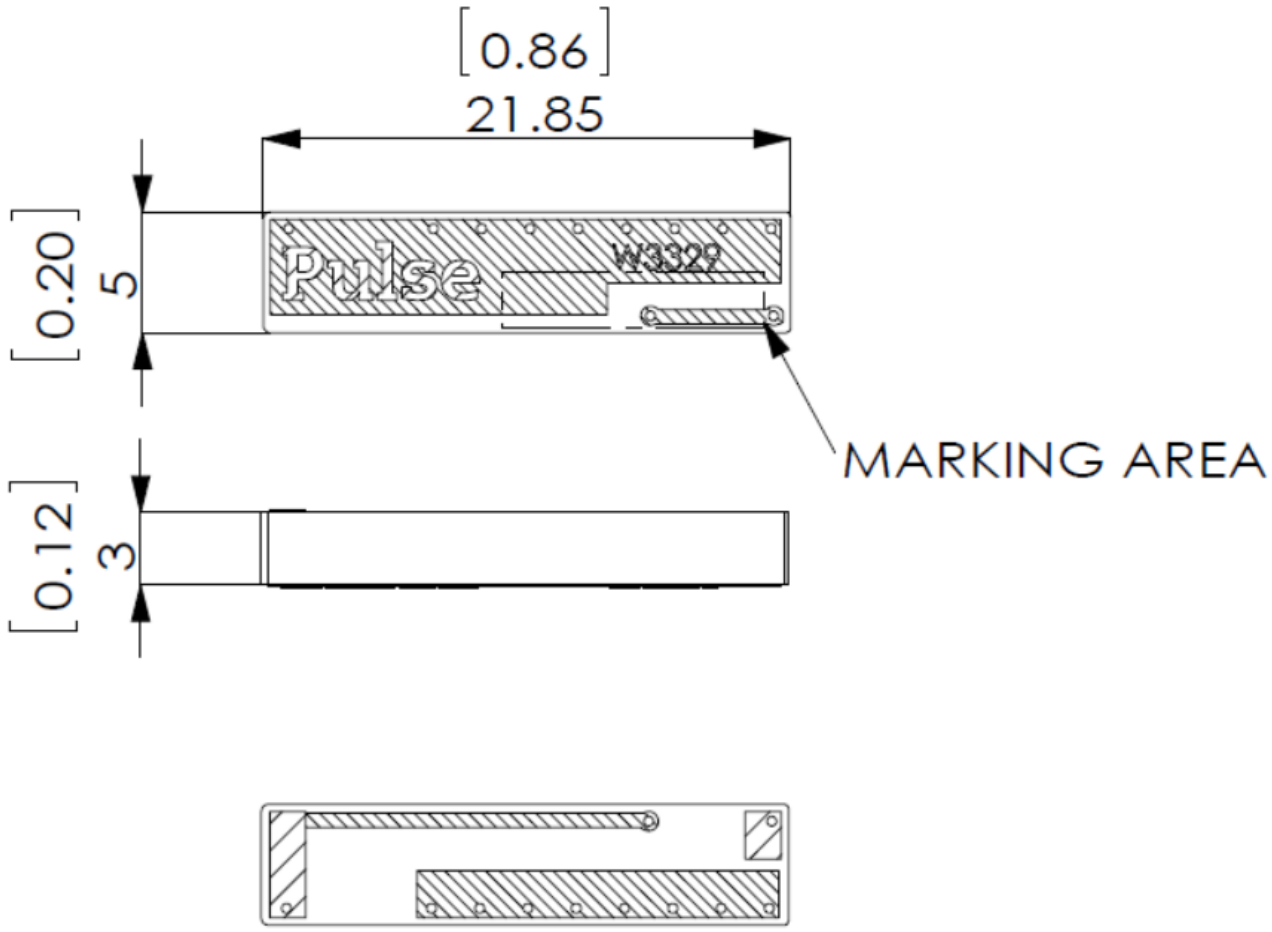
RoHS COMPLIANT

Description: 868MHz PCB SMT Antenna

Series: Domino

PART NUMBER: W3329

MECHANICAL DRAWING



DIMENSION UNIT IS [INCH]MM

RoHS COMPLIANT

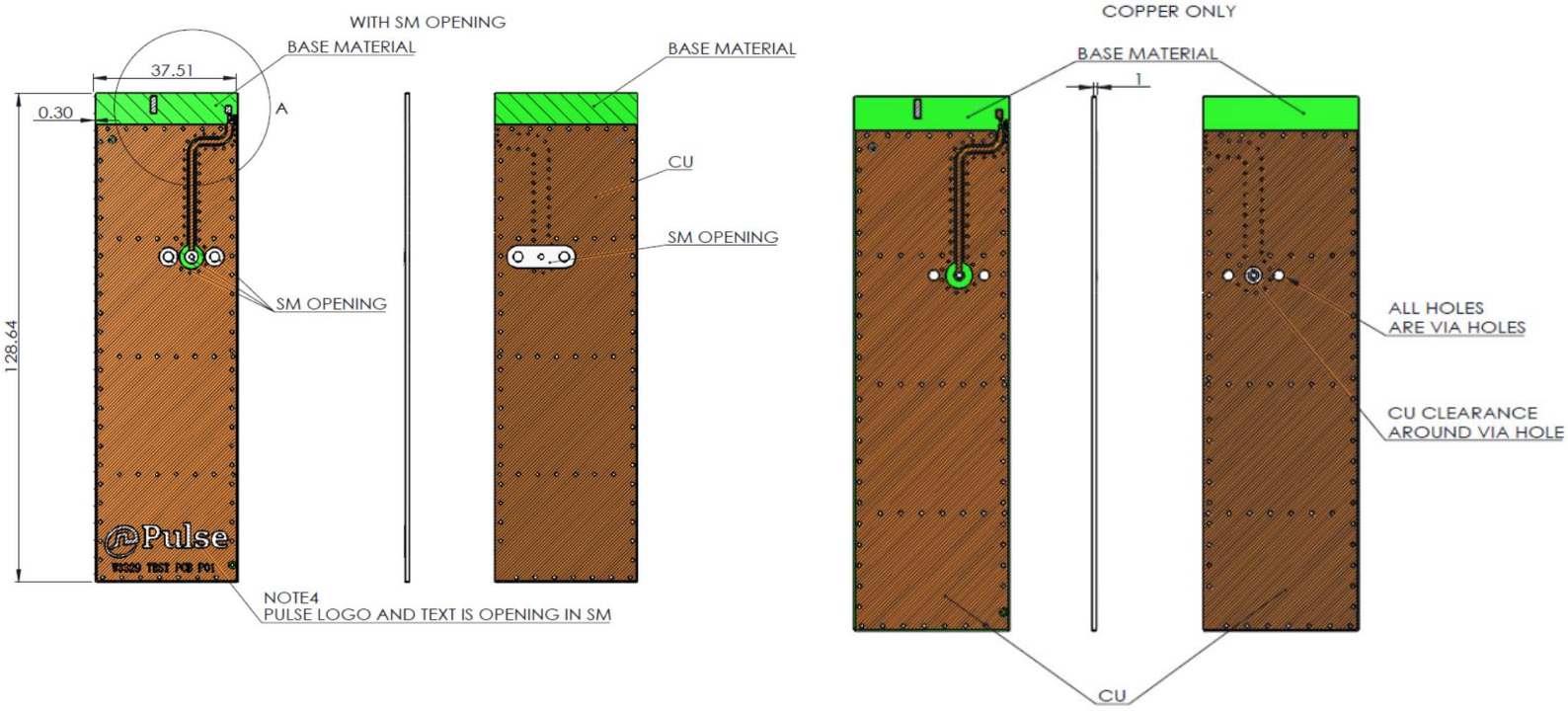
Description: 868MHz PCB SMT Antenna

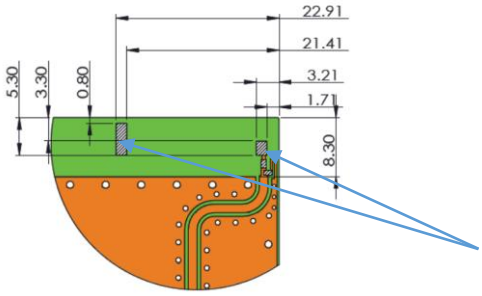
Series: Domino

PART NUMBER: W3329

TEST SETUP

Pulse reference test PCB for W3329 antenna





Antenna soldering pad

RoHS COMPLIANT

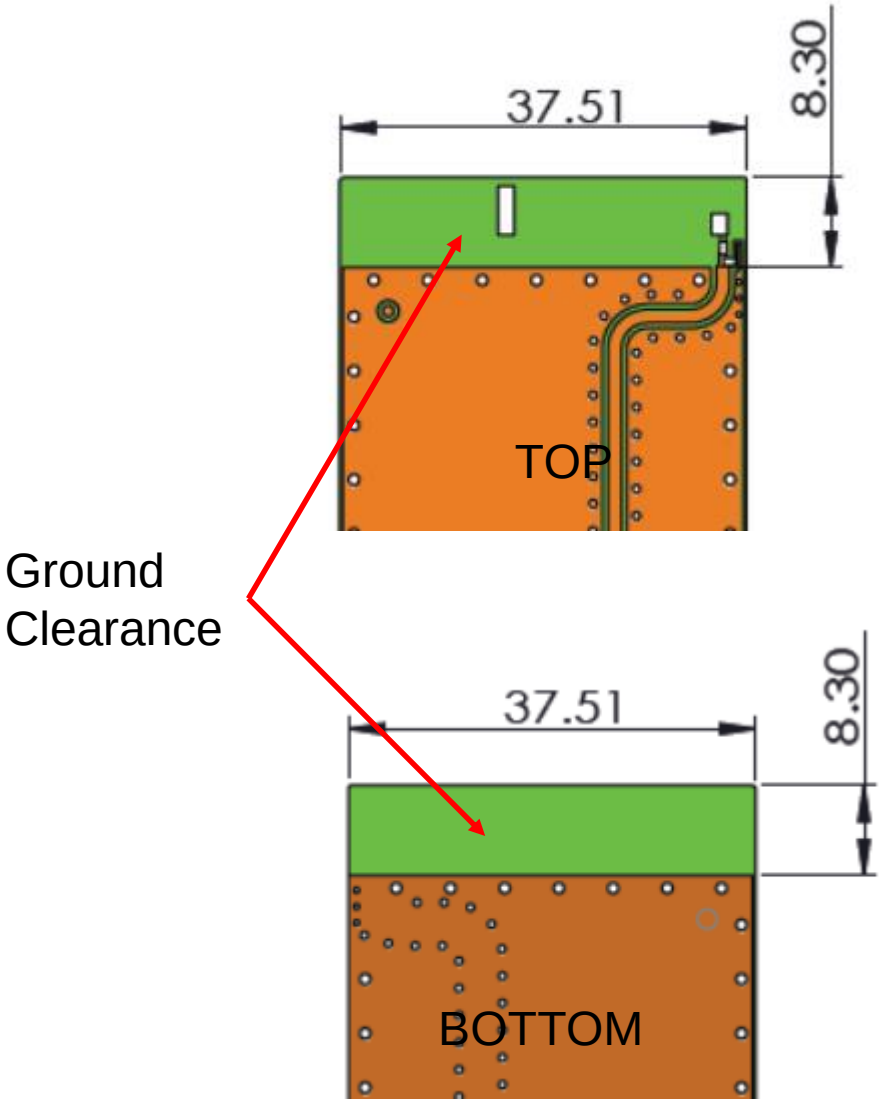
Description: 868MHz PCB SMT Antenna

Series: Domino

PART NUMBER: W3329

TEST SETUP

PWB ground clearance area (Top):37.5x8.3mm
PWB ground clearance area (Bottom):37.5x8.3mm



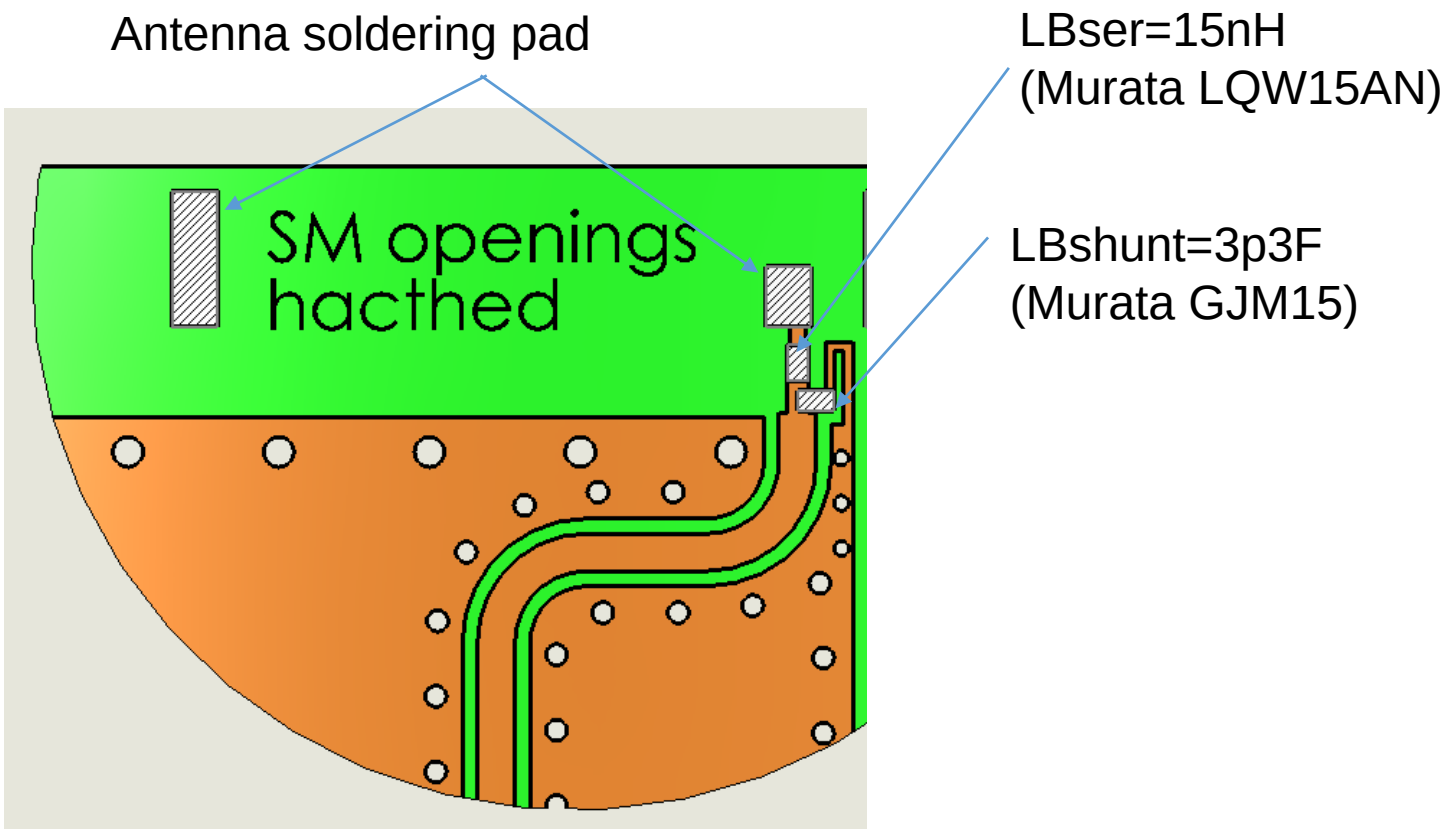
RoHS COMPLIANT

Description: 868MHz PCB SMT Antenna

Series: Domino

PART NUMBER: W3329

TEST SETUP



Recommended test board PCB layout for electrical characteristic measurement. Substrate material FR4, thickness 1mm

All dimensions are in mm

RoHS COMPLIANT

TEST SETUP

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

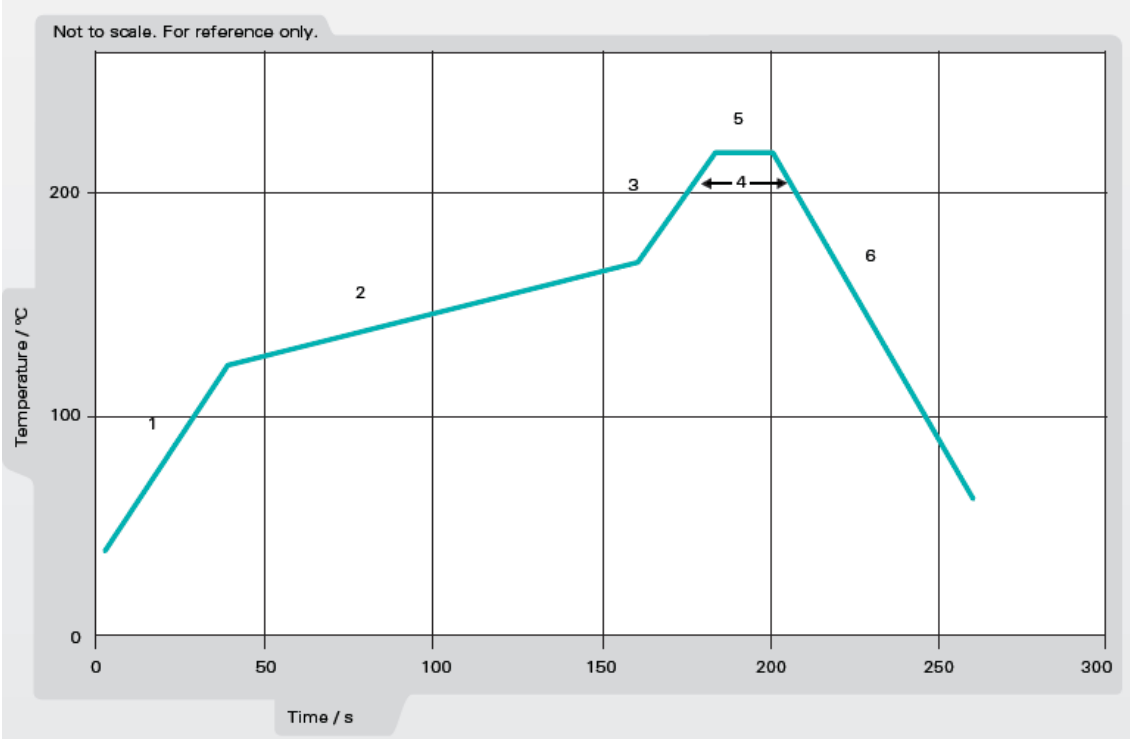


Figure 1. Minimum temperature profile recommendation for reflow soldering process

RoHS COMPLIANT

Description: 868MHz PCB SMT Antenna

Series: Domino

PART NUMBER: W3329

TEST SETUP

	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

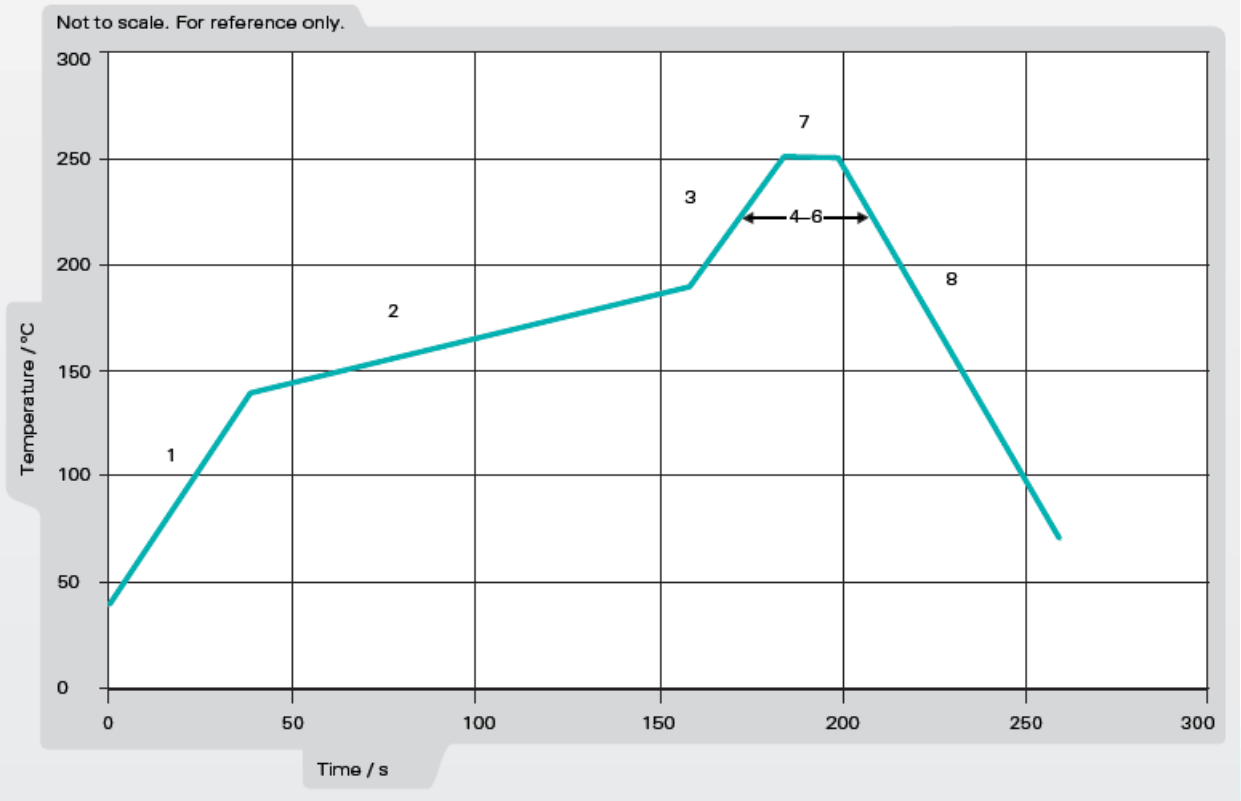


Figure 2. Maximum temperature profile recommendation for reflow soldering process

RoHS COMPLIANT

Description: 868MHz PCB SMT Antenna

Series: Domino

PART NUMBER: W3329

CHARTS

Return Loss

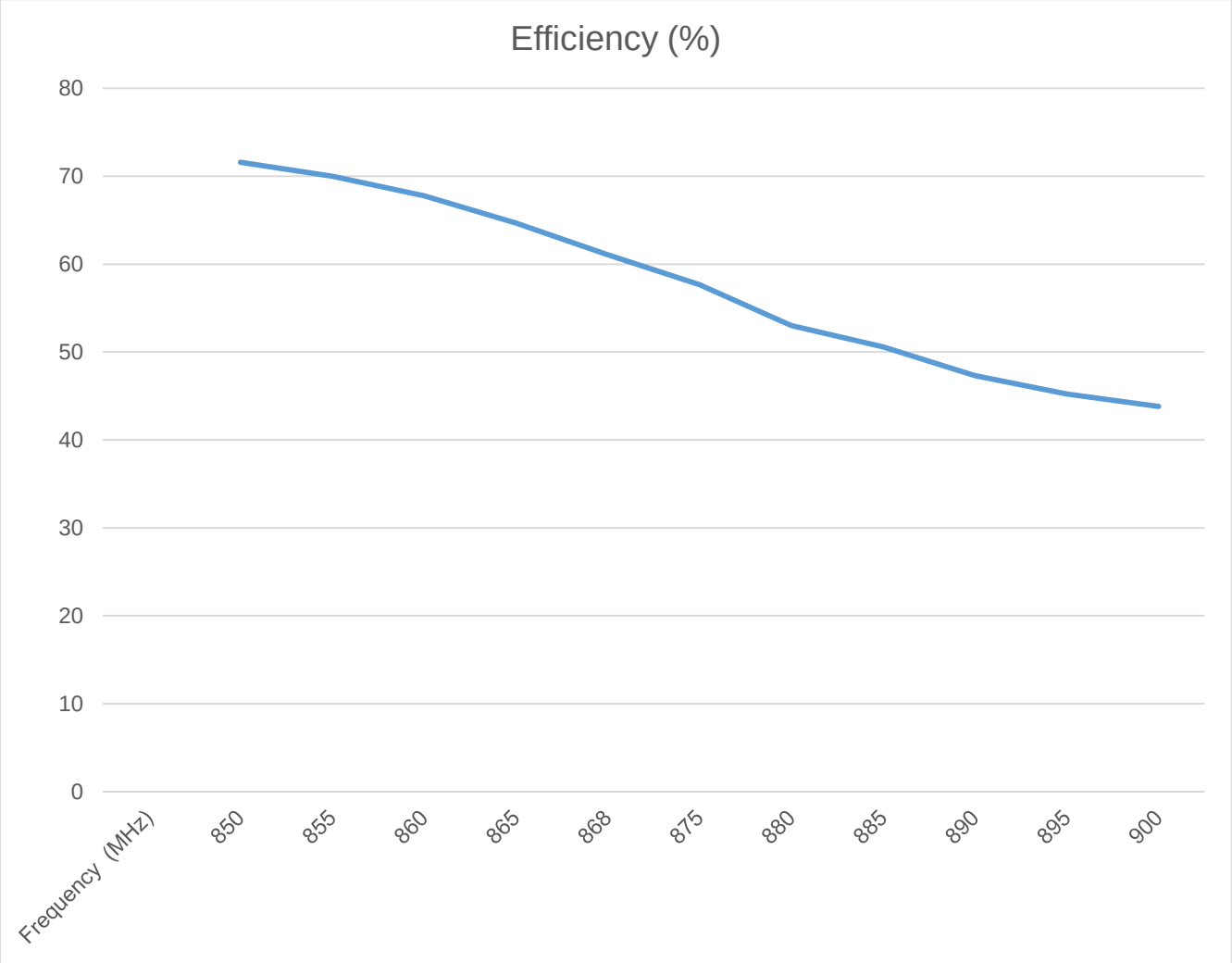
Description: 868MHz PCB SMT Antenna

Series: Domino

PART NUMBER: W3329

CHARTS

Efficiency(%)



RoHS COMPLIANT

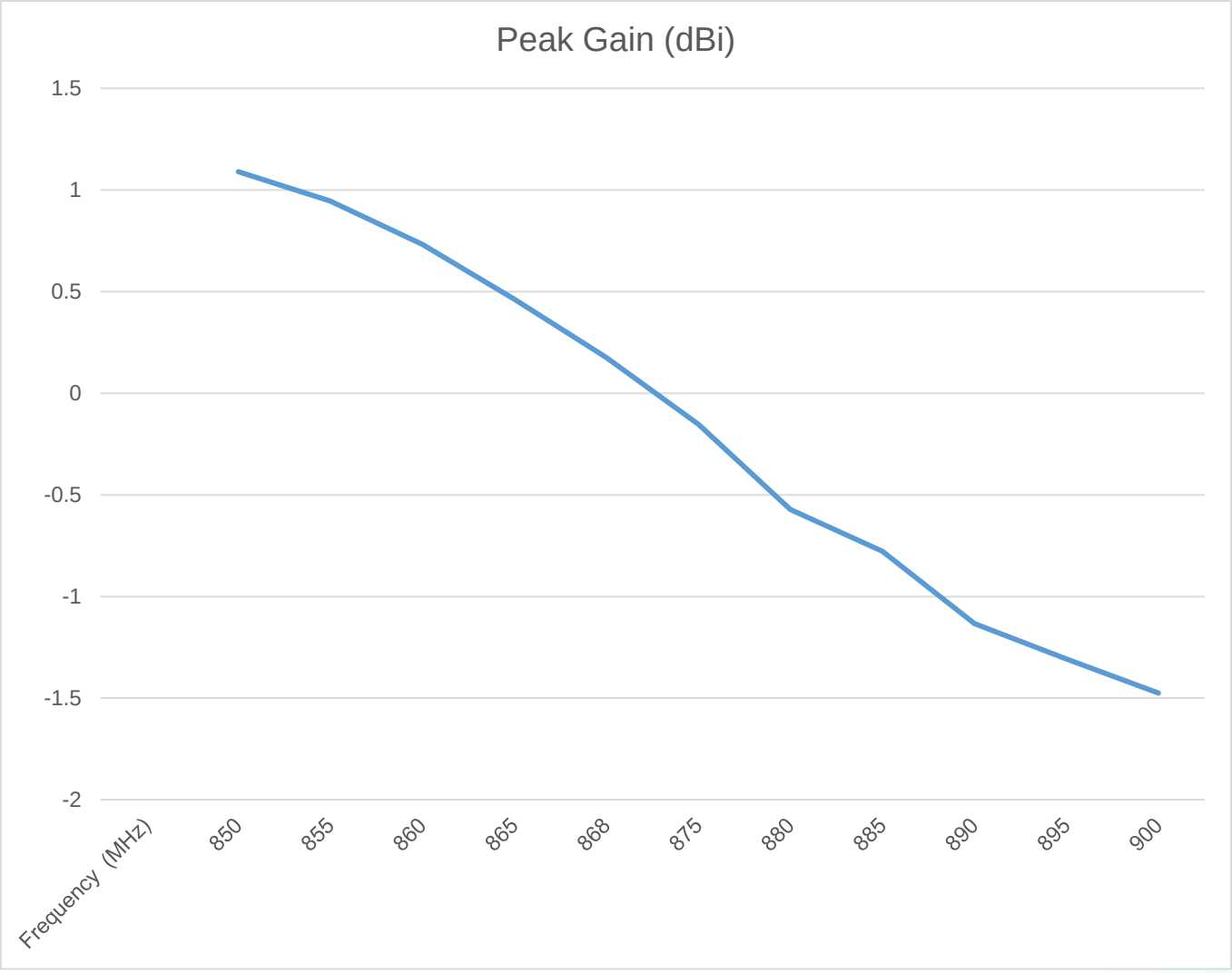
Description: 868MHz PCB SMT Antenna

Series: Domino

PART NUMBER: W3329

CHARTS

Peak Gain(dBi)



Description: 868MHz PCB SMT Antenna

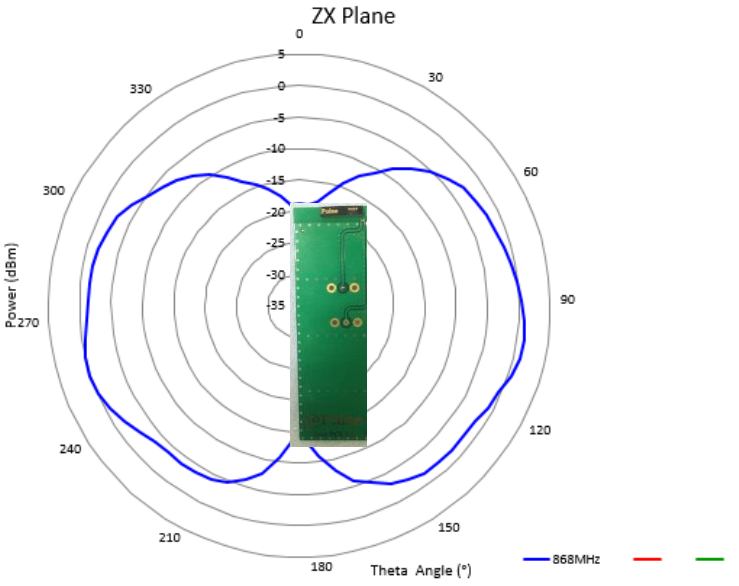
Series: Domino

PART NUMBER: W3329

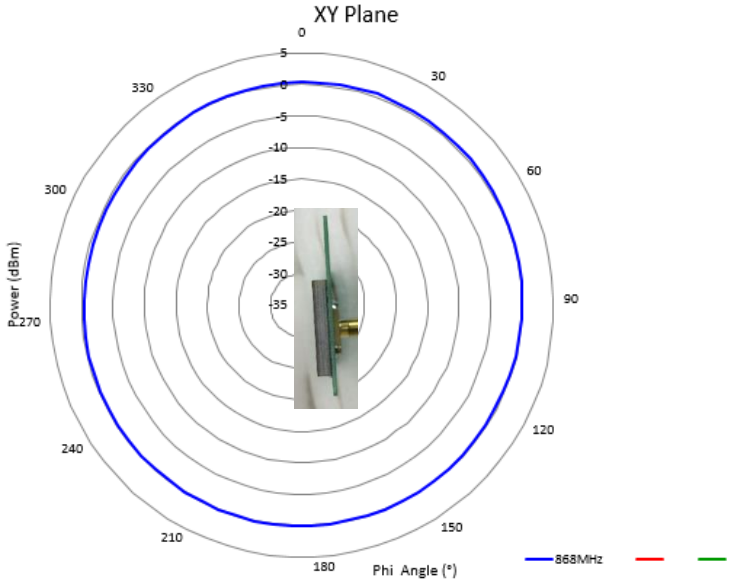
CHARTS

Free Space Radiation Pattern

Elevation Plane



Horizontal Plane



RoHS COMPLIANT

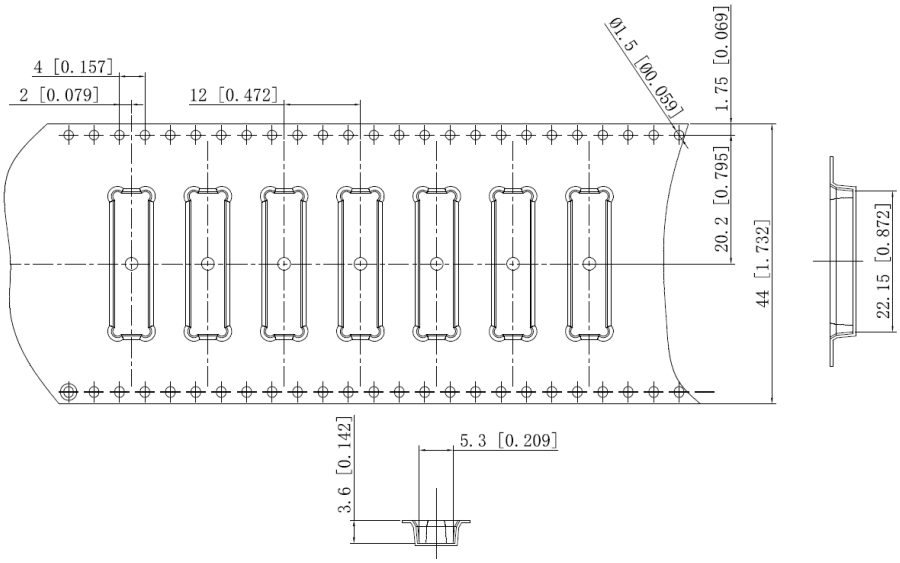
Description: 868MHz PCB SMT Antenna

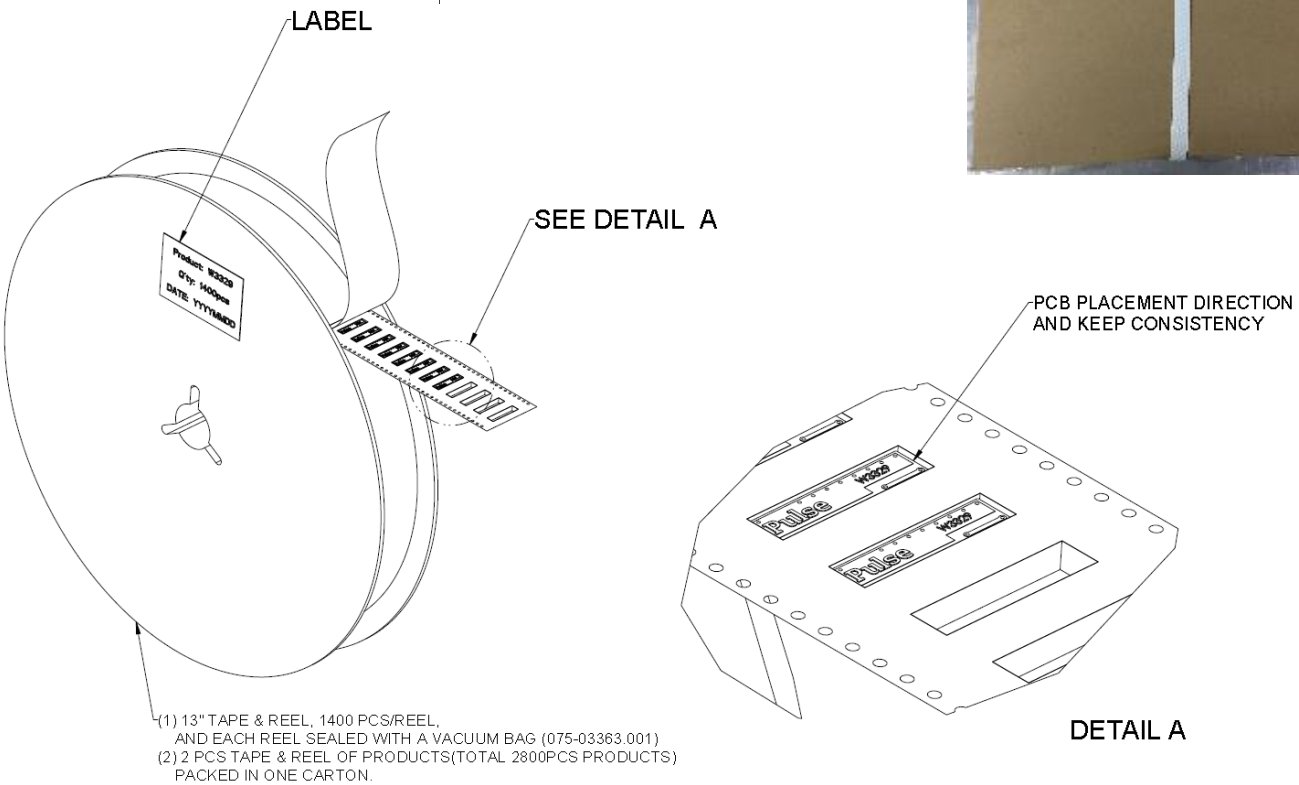
Series: Domino

PART NUMBER: W3329

PACKAGING (TAPE & REEL)

Reel packing, 1400 PCS/Reel
2 Reels/Carton box, total 2800 PCS/Carton box





Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9