

Description: ISM 868 / 915 MHz Chip Antenna

PART NUMBER: W3014

Series: Ceramic



[0.394 ±0.004] 10 ±0.10 [0.059 ±0.008] 1.50 ±0.008 1.50 ±0.008

Features:

- Low profile
- Compact size W x L x H (10 x 3.2 x 1.5 mm)
- Low weight (240 mg)
- Lead free materials
- Fully SMD compatible
- Lead free soldering compatible

Applications:

- 868MHz radios
- 915MHz radios

All dimensions are in mm / inches

Issue: 1622

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 848-888MHz/895-935MHz

Nominal Impedance 50Ω

Return loss -7dB

Gain (Radiating element -0.5dBi +/- 1 dB

Radiation Pattern Omni

Polarization: linear

Total Efficiency 35%



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MECHANICAL SPECIFICATIONS

Size 10x3.2x1.5 mm

Weight 240 mg

ENVIRONMENTAL SPECIFICATIONS

Operating temperature

-40/+85° C

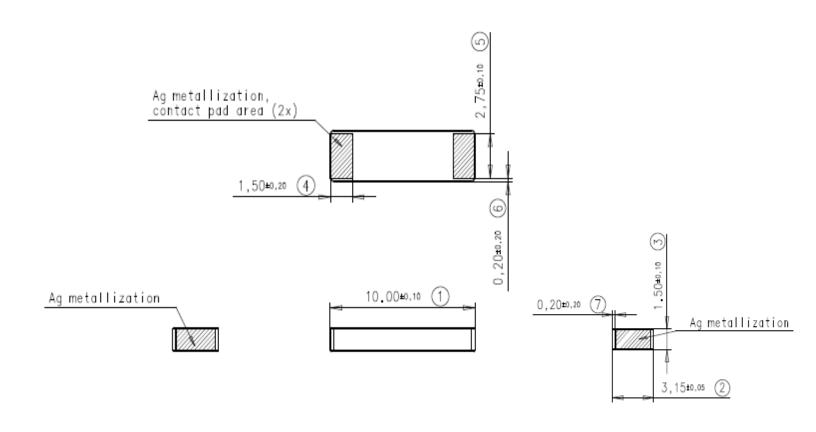


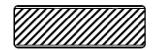


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MECHANICAL DRAWING







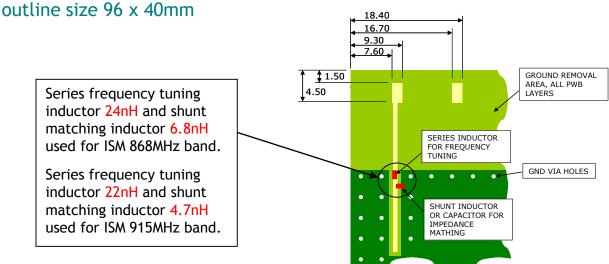
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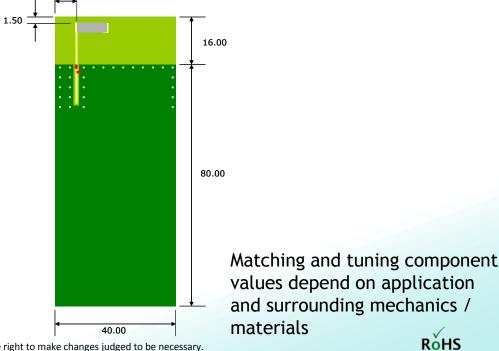
OTHER SPECIFICATIONS

Ground cleared under antenna, clearance area 40 mm x 16 mm

Recommended test board layout for electrical characteristic measurement, test board



Feed line should be designed to match 50 Ω characteristic impedance, depending on PWB material and thickness.



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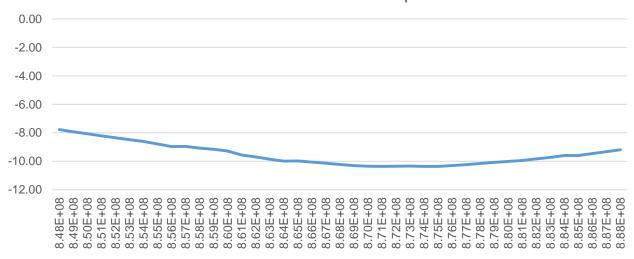
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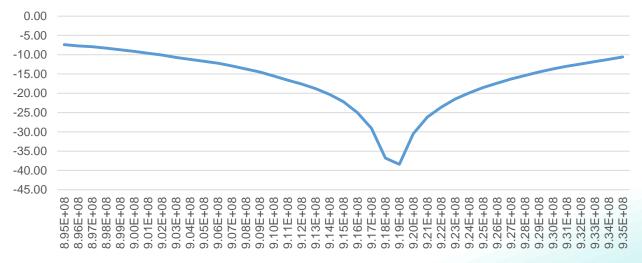
CHARTS

Return Loss

ISM 868MHz RL in free space



ISM 915MHz RL in free space



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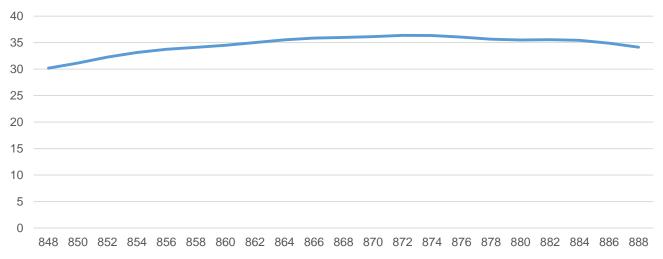
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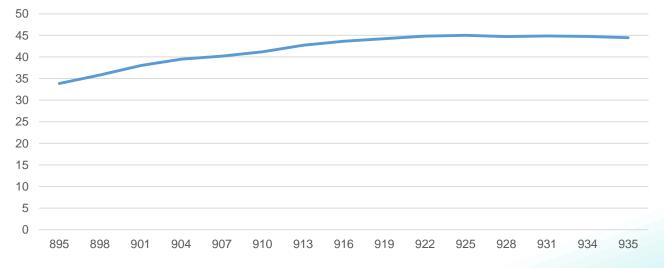
CHARTS

Efficiency(%)

ISM 868MHz Total Efficiency in free space, %



ISM 915MHz Total Efficiency in free space, %







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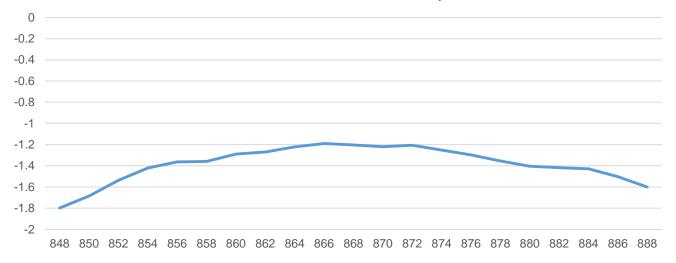
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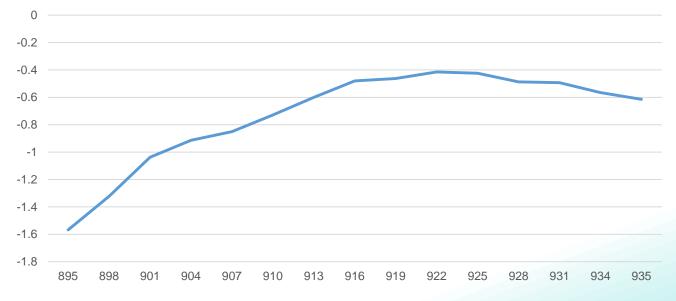
CHARTS

Peak Gain(dBi)

ISM 868MHz Peak Gain in free space, dBi



ISM 915MHz Peak Gain in free space, dBi







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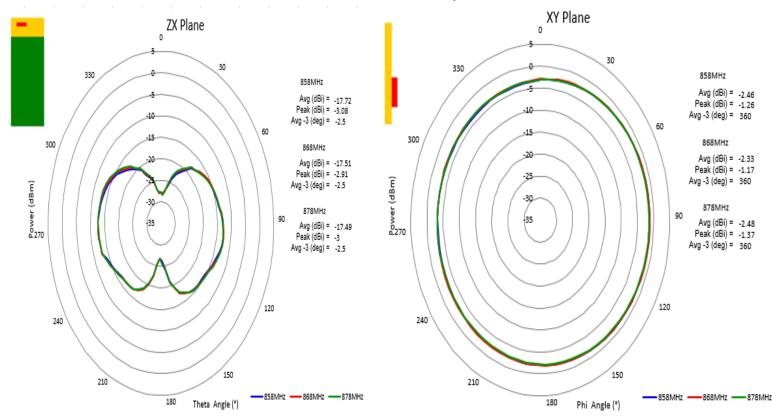
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CHARTS

free space radiation pattern

ISM 868MHz radiation pattern





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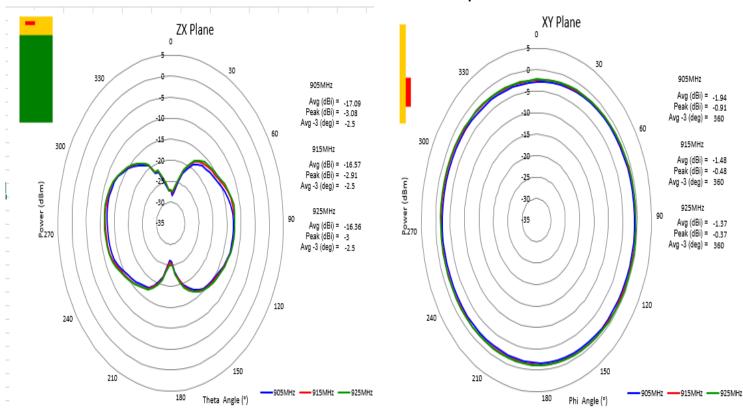
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free space radiation pattern

ISM 915MHz radiation pattern





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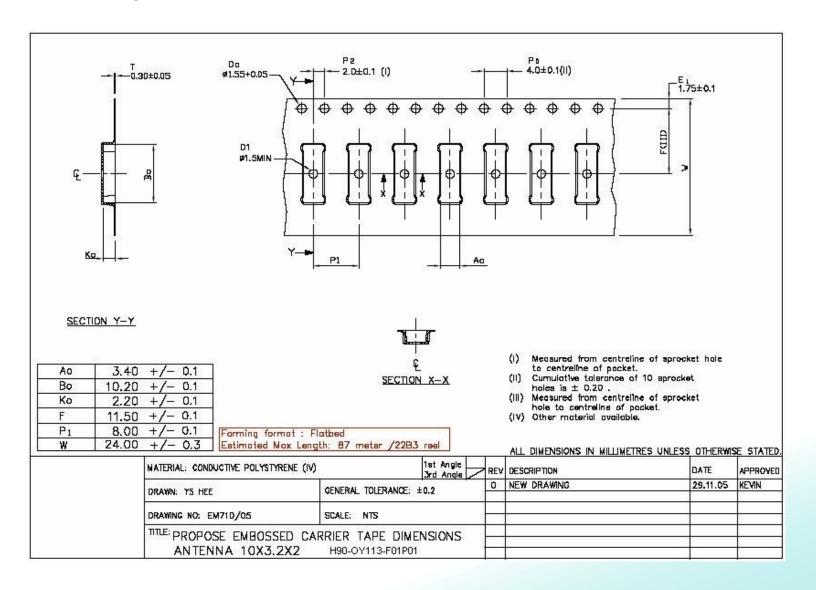
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PACKAGING

General

Tape and reel packing is used. Carrier tape, reel and box dimensions are presented in following pictures.

Carrier tape



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ROHS

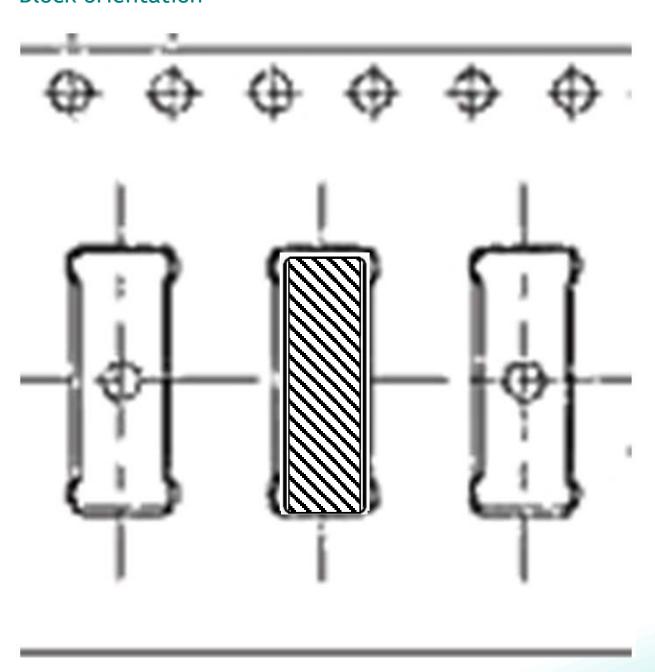


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Block orientation





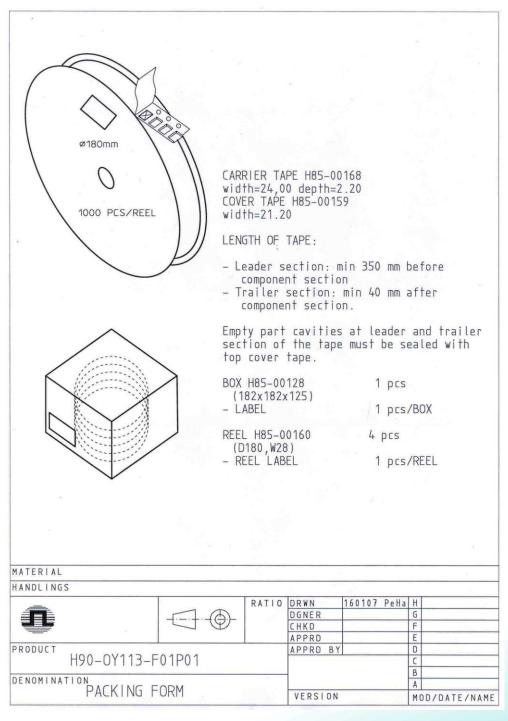


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Packing form



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