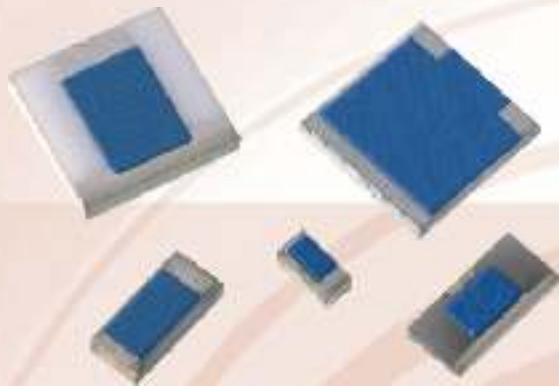


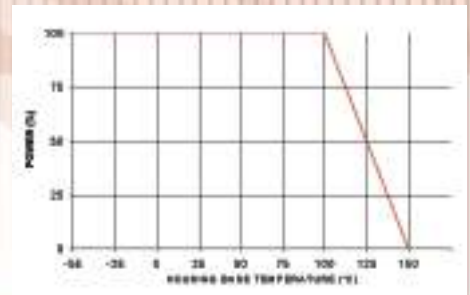
SMT Terminations and Attenuators



Radiall Microwave product line is pleased to introduce SMT resistive load and attenuator, suitable for surface mount applications. The small size and low cost components can be used in many applications such coupler loads, drop-in isolators or other wireless applications...

The product is designed for 50 application for wireless band up to 3 GHz and also 18 GHz using Al₂O₃ or AlN substrate, power range from 10 Watts to 120 Watts. Packaged in reels for easy circuit integration, thanks to the use of pick and place machines. Soldering operation can be achieved by reflow ovens. Available in standard dimensions offered in the industry, such as 2.54 x 5.08mm, 6.35 x 6.35mm or 6.35 x 9.40mm.

Radiall offers a large connectorized termination and attenuator range. The SMT termination and attenuators broadens our offering in the RF components market.



Characteristics

| | | |
|--------------------|---|--|
| Impedance | : | 50 ±5% |
| Attenuation value | : | 3, 6, 10 & 20dB |
| Temperature range | : | -55°C / +150°C |
| Substrate material | : | Al ₂ O ₃ and AlN |
| Resistive film | : | Thick film |
| Finish | : | Polymer film / contacts Pt Ag |

A) SMT Chip for printed circuit board (true surface mount) are package in reel for easy circuit integration with the use of pick and place machines. Ground metallization and solderable terminal are on the same side below.

B) Chip with ground metallization below for a direct attachment to the heat sink, solderable terminal is on the top.

TERMINATIONS

A) SMT Termination are package in a reel of 100 or 2000 pcs

| Part number 100 pcs | Part number 2000 pcs | Material | F (GHz) | P (Watts) | Z (Ohms) | Dimension mm (inches) |
|---------------------|----------------------|--------------------------------|---------|-----------|----------|-----------------------|
| R401 210 005 | R401 210 002 | AL ₂ O ₃ | 2,5 | 10 | 50 | 6,35x6,35 (0.25x0.25) |
| R401 211 005 | R401 211 002 | | 4,4 | 30 | | |
| R401 210 105 | R401 210 102 | ALN | 2 | 10 | | 5,08x2,54 (0.20x0.10) |
| R401 211 105 | R401 211 102 | | 2,2 | 20 | | 6,35x6,35 (0.25x0.25) |
| R401 410 105 | R401 410 102 | | 4,4 | 60 | | 9,40x6,35 (0.37x0.25) |
| R401 411 105 | R401 411 102 | | 2,5 | 120 | | |

B) Termination are package in bags of 100pcs

| Part number 100 pcs | Material | F (GHz) | P (Watts) | Z (Ohms) | Dimension mm (inches) |
|---------------------|--------------------------------|---------|-----------|-----------------------|-----------------------|
| R401 110 005 | AL ₂ O ₃ | 2 | 2 | 50 | 2,54x1,27 (0.10x0.05) |
| R401 212 005 | | 3,5 | 30 | | 6,35x6,35 (0.25x0.25) |
| R401 310 005 | | 2,5 | 50 | | 9,40x6,35 (0.37x0.25) |
| R401 220 105 | ALN | 18 | 10 | | 2,54x5,08 (0.10x0.20) |
| R401 212 105 | | 2,2 | 10 | | 5,08x2,54 (0.20x0.10) |
| R401 412 105 | | 4 | 60 | | 6,35x6,35 (0.25x0.25) |
| R401 413 105 | | 2,5 | 120 | 9,40x6,35 (0.37x0.25) | |

ATTENUATORS

A) SMT Attenuator are package in a reel of 100 or 2000pcs

| Part number 100 pcs | Part number 2000 pcs | Material | Attenuation (dB) | F (GHz) | P (Watts) | Z (Ohms) | Dimension mm (inches) |
|---------------------|----------------------|--------------------------------|------------------|---------|-----------|----------|-----------------------|
| R421 103 005 | R421 103 002 | AL ₂ O ₃ | 3 | 2 | 3 | 50 | 6,35x6,35 (0.25x0.25) |
| R421 106 005 | R421 106 002 | | 6 | | | | |
| R421 110 005 | R421 110 002 | | 10 | | | | |

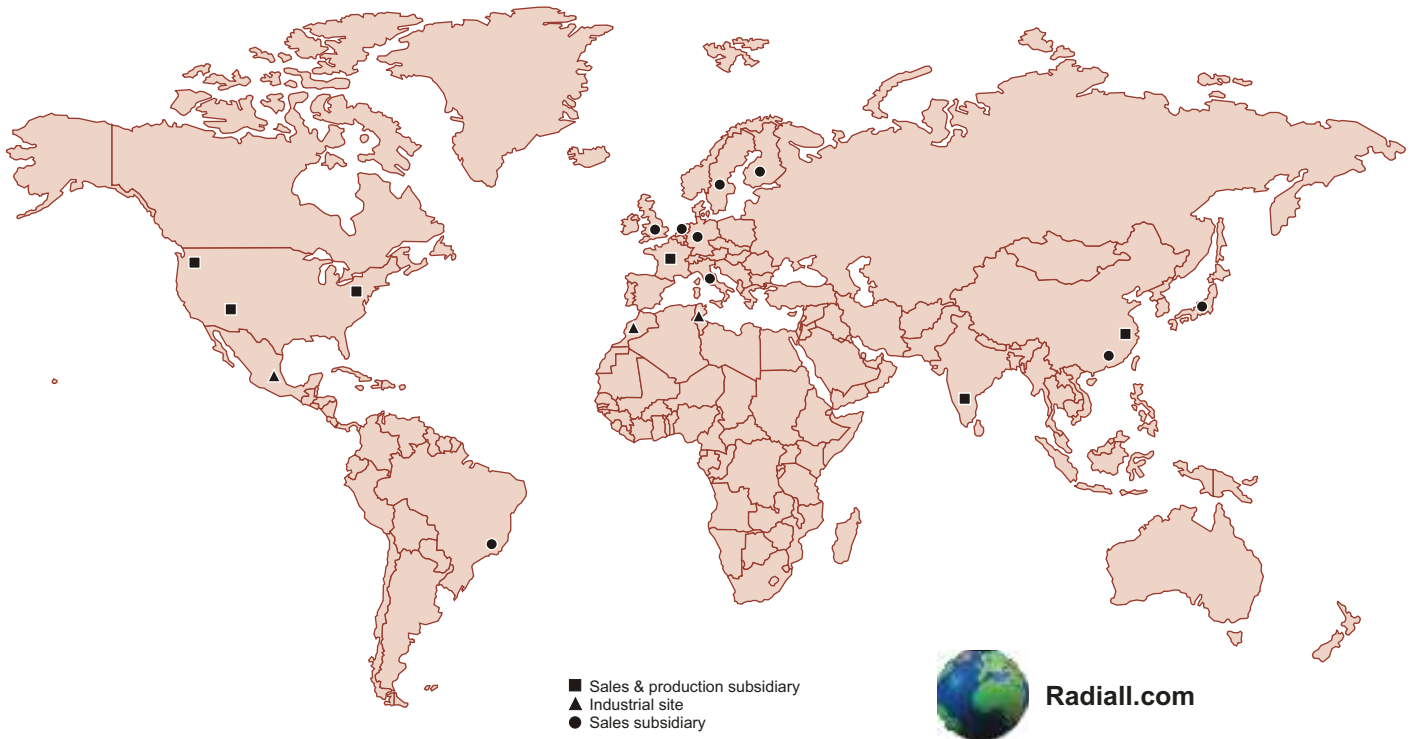
B) Attenuator are package in bags of 100pcs

| Part number 100 pcs | Material | Attenuation (dB) | F (GHz) | P (Watts) | Z (Ohms) | Dimension mm (inches) |
|---------------------|----------|------------------|---------|-----------|----------|-----------------------|
| R421 420 105 | ALN | 20 | 2,2 | 100 | 50 | 9,40x6,35 (0.37x0.25) |

ISO 9001 APPROVED



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