

Multilayer Chip BALUN AMB1608 / AMB1005 Series



Features

- Ultra Small Size and Low Profile
1.6mm (L)×0.8mm (W)×0.6mm (H) typ.
1.0mm (L)×0.5mm (W)×0.4mm (H) typ.
- Low Insertion Loss
(0.6dB typ. / AMB1005C2450series)
- RoHS Compliant

Applications

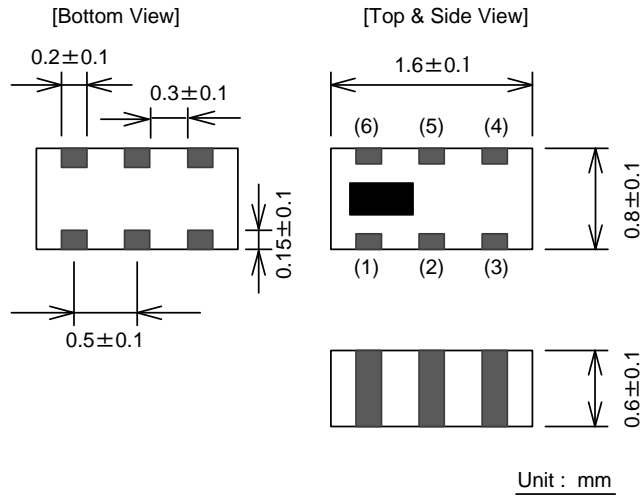
- Mobile phone
- W-LAN , Bluetooth , WiMAX, etc.

Specification

| System | Part Number | Frequency Range [MHz] | Balance Impedance [ohm] | Insertion Loss [dB] typ. | Return Loss [dB] typ. | Phase Balance [deg] typ. | Amplitude Balance [dB] typ. |
|--------------------|-----------------------------------|-----------------------|-------------------------|--------------------------|-----------------------|--------------------------|-----------------------------|
| Smart Meter | AMB1608C0923Z05AT (Developing) | 915.9-929.7 | 50 | 0.6 | 20 | 180+/-10 | 1.0 |
| | AMB1608C0923Z10AT (Developing) | 915.9-929.7 | 100 | 0.6 | 20 | 180+/-10 | 1.0 |
| W-LAN | AMB1608C2450Z05 AT | 2400-2500 | 50 | 0.6 | 15 | 180+/-10 | 0.5 |
| Bluetooth | AMB1608C2450Z10 AT | 2400-2500 | 100 | 0.6 | 15 | 180+/-10 | 0.5 |
| WiMAX | AMB1608C2500Z05 AT | 2300-2700 | 50 | 0.7 | 15 | 180+/-10 | 1.0 |
| | AMB1608C2500Z10 AT | 2300-2700 | 100 | 0.6 | 15 | 180+/-10 | 1.0 |
| | AMB1608C3600Z05 AT | 3300-3900 | 50 | 0.7 | 15 | 180+/-10 | 1.0 |
| | AMB1608C3600Z10 AT | 3300-3900 | 100 | 0.6 | 15 | 180+/-10 | 1.0 |
| W-LAN | AMB1608C5425Z05 AT | 4900-5950 | 50 | 0.8 | 15 | 180+/-10 | 1.0 |
| | AMB1608C5425Z10 AT | 4900-5950 | 100 | 0.6 | 15 | 180+/-10 | 1.0 |
| | AMB1608C5512Z05 AT | 5150-5875 | 50 | 0.8 | 15 | 180+/-10 | 1.0 |
| | AMB1608C5512Z10 AT | 5150-5875 | 100 | 0.6 | 15 | 180+/-10 | 1.0 |
| W-LAN Bluetooth | AMB1005C2450Z05AT | 2400-2500 | 50 | 0.65 | 18 | 180+/-10 | 0.3 |
| | AMB1005C2450Z07AT | 2400-2500 | 75 | 0.6 | 20 | 180+/-10 | 0.3 |
| | AMB1005C2450Z10AT | 2400-2500 | 100 | 0.6 | 20 | 180+/-10 | 0.3 |
| WiMAX | AMB1005C2500Z05 AT | 2300-2700 | 50 | 0.7 | 15 | 180+/-10 | 1.0 |
| | AMB1005C2500Z07AT | 2300-2700 | 75 | 0.7 | 16 | 180+/-10 | 1.0 |
| | AMB1005C2500Z10 AT | 2300-2700 | 100 | 0.7 | 16 | 180+/-10 | 0.8 |

AMB1608series

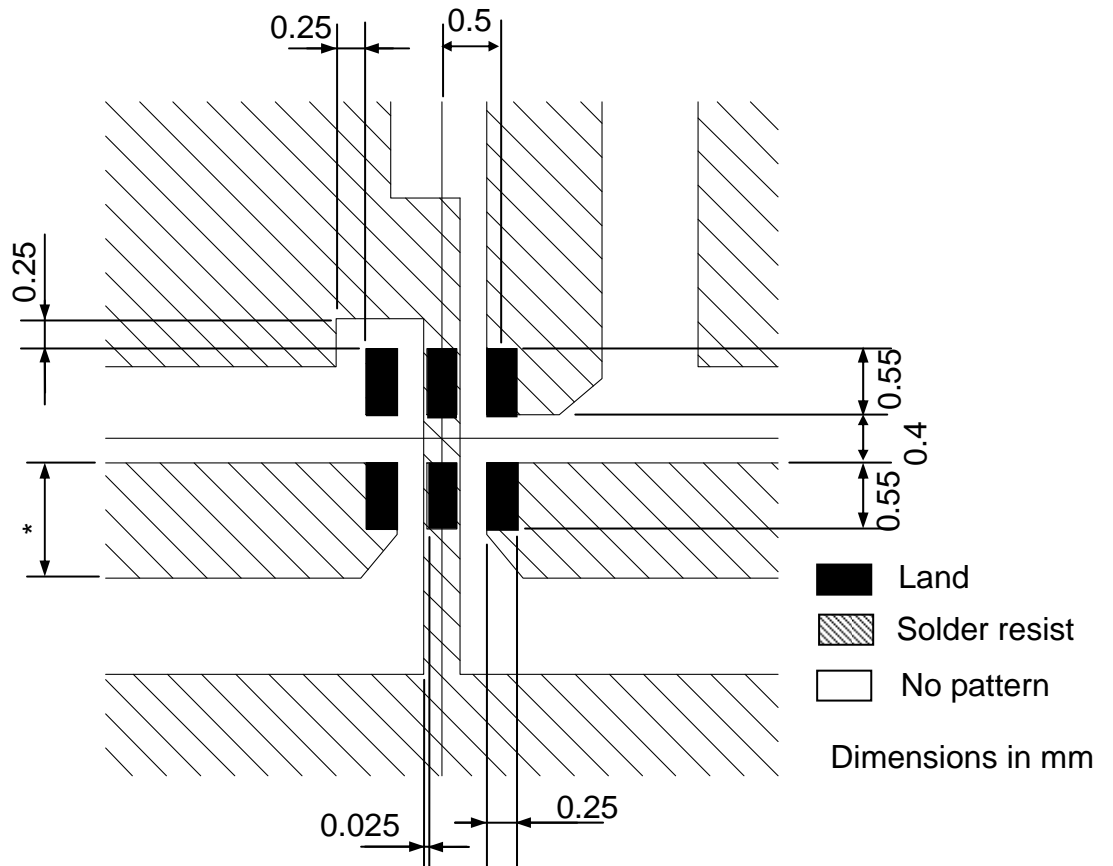
SHAPE & DIMENSIONS Unit : mm



Unit : mm

- | | | | |
|-----|---------------------------|-----|--------------|
| (1) | Unbalance Port | (4) | Balance Port |
| (2) | GND or DC Feed + RFGND | (5) | GND |
| (3) | Balance Port | (6) | NC |

RECOMMENDED LAND DIMENSIONS



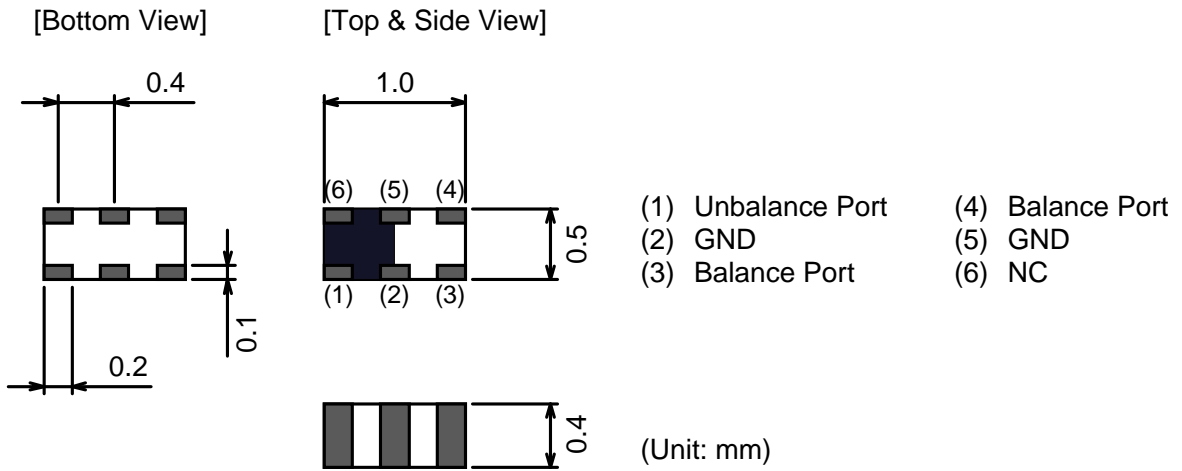
- Land
- Solder resist
- No pattern

Dimensions in mm

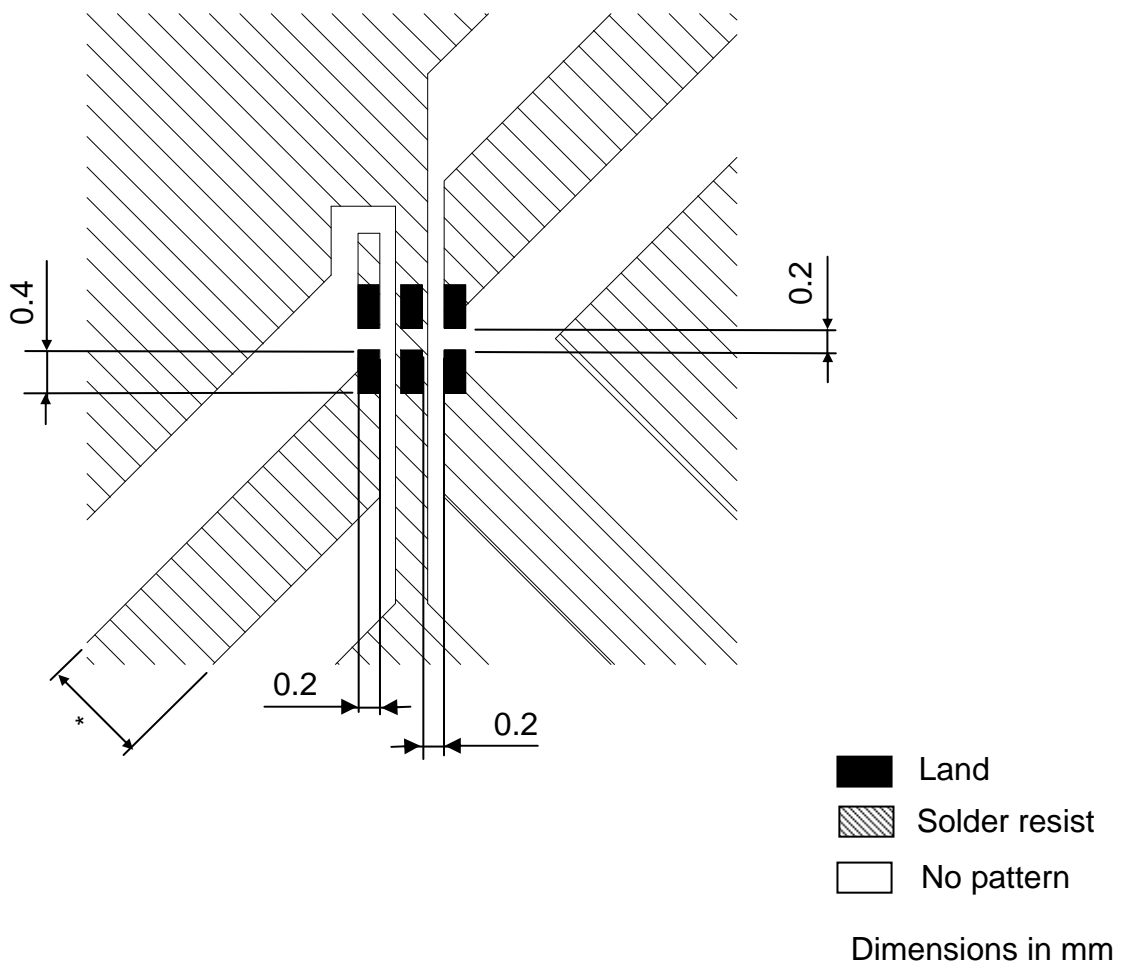
*Line width to be designed to match 50Ω characteristic impedance.

AMB1005series

SHAPE & DIMENSIONS Unit : mm



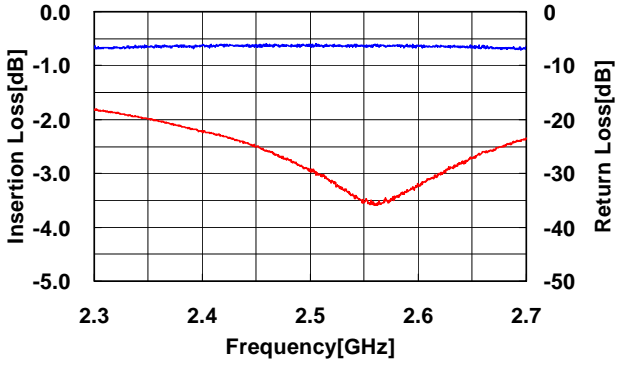
RECOMMENDED LAND DIMENSIONS



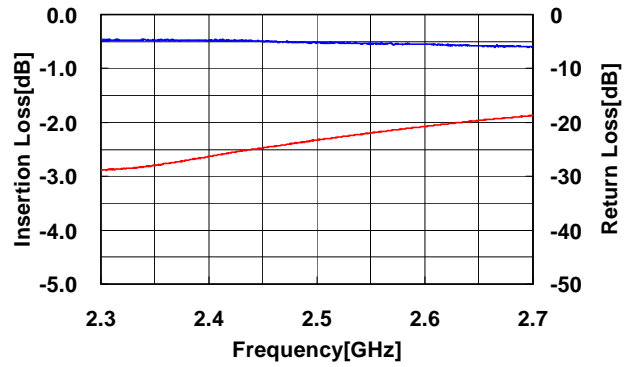
*Line width to be designed to match 50Ω characteristic impedance.

Frequency Characteristics

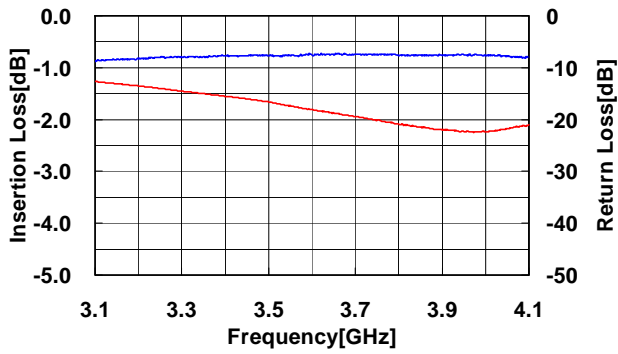
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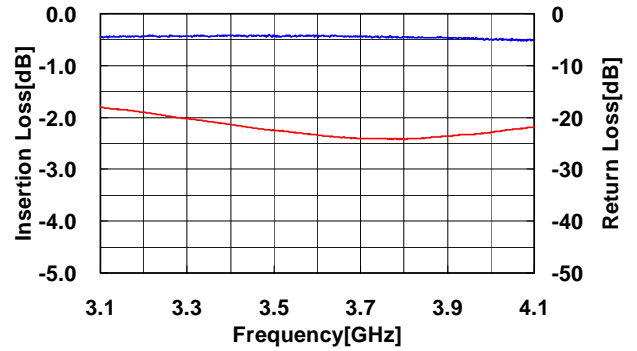
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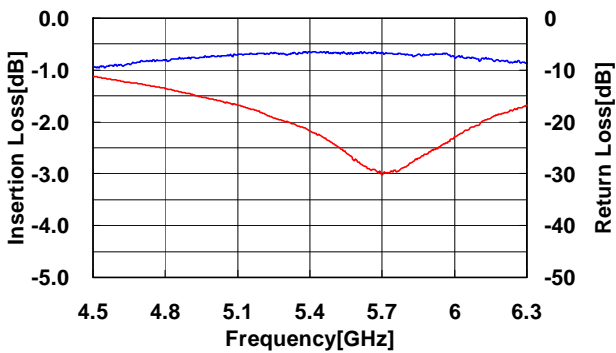
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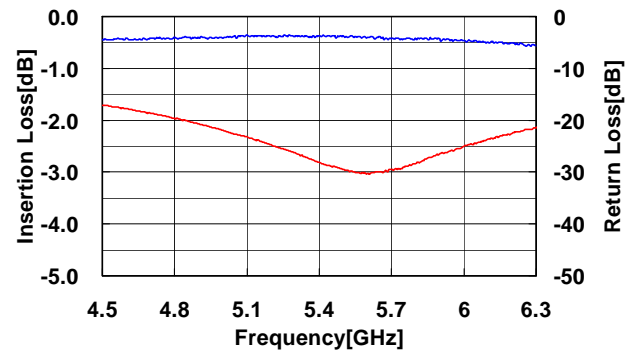
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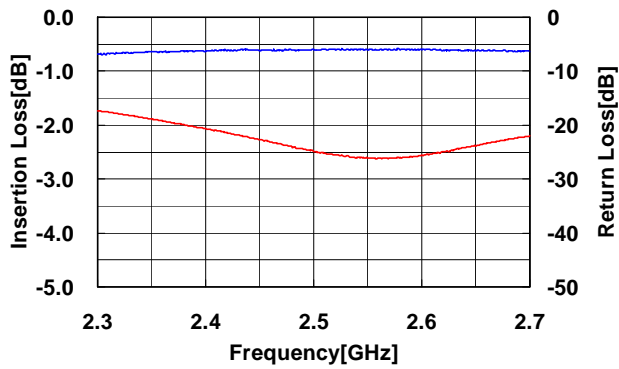
AMB1608C5425Z05AT



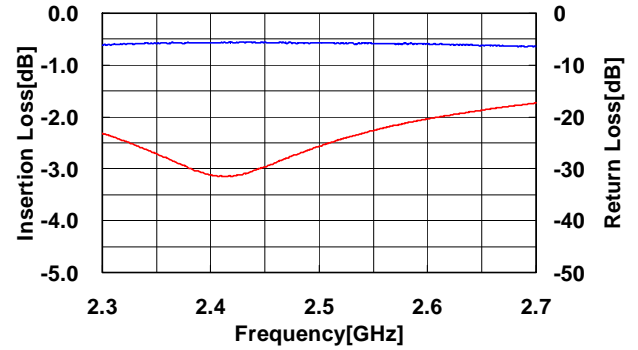
AMB1608C5425Z10AT



AMB1005C2450Z05AT



AMB1005C2450Z10AT



Notes: This catalog is effective as of December, 2012. The contents of this catalog are subject to change without prior notice as a result of product improvement or discontinuation of production. Therefore, please be sure to check with our sales representatives about the contents before your ordering. Product specifications described in this catalog are for reference only. Upon the actual use, please obtain specification sheets separately to check the contents.