

50 Ω 1275 to 2200MHz 1:2 Ratio

Ver. A

2023.05.26

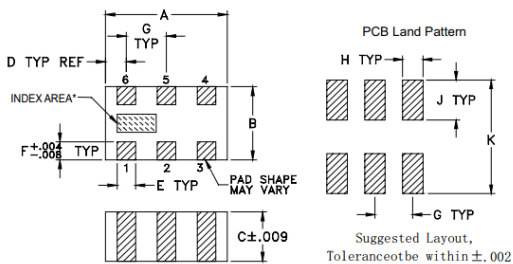
Maximum Rating

| | |
|-----------------------|----------------|
| Operating Temperature | -40°C~+85°C |
| Storage Temperature | -55°C~+100°C |
| RF Input Power | 3W max at 25°C |

Pin Connections

| | |
|-------------------------------|---|
| PRIMARY DOT (Unbalanced Port) | 1 |
| PRIMARY (GND) | 2 |
| SECONDARY (Balanced) | 3 |
| SECONDARY DOT (Balanced) | 4 |
| NOT USED (GND Externally) | 5 |
| NO CONNECTION | 6 |

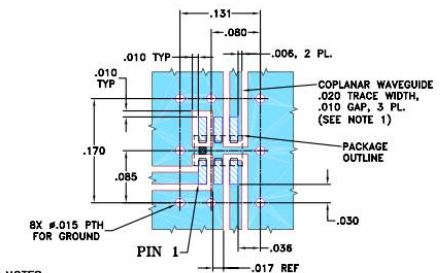
Outline Drawing



Outline Dimensions (inch/mm)

| A | B | C | D | E | F |
|------|------|------|------|-------|------|
| .079 | .049 | .033 | .014 | .012 | .012 |
| 2.0 | 1.25 | 0.84 | 0.36 | 0.30 | 0.30 |
| G | H | J | K | wt | |
| .026 | .013 | .039 | .110 | grams | |
| 0.66 | 0.35 | 1.00 | 2.80 | .008 | |

Recommended PC Board Pattern



NOTES:

- COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS .010" ± .001". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).
■ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

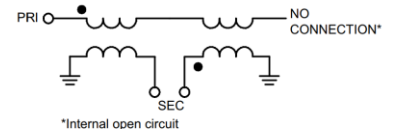
* Line width should be designed to match 50 characteristic impedance, depending on PCB material and thickness.

Features

- Multilayer LTCC (Low Temperature Cofired Ceramics) Technology.
- Miniatured Size L*W*H: 2.0x1.25x0.85mm
- Low Insertion Loss reduces power consumption
- Low inband Amplitude and Phase imbalance
- Single ended 50 ohm differential 100 ohm
- LTCC Structure



RoHS Compliant



Functional Schematic

Application

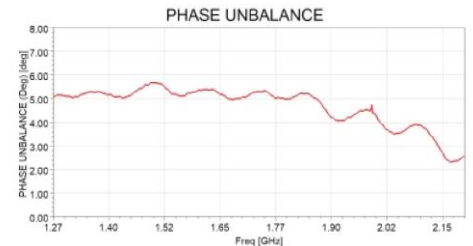
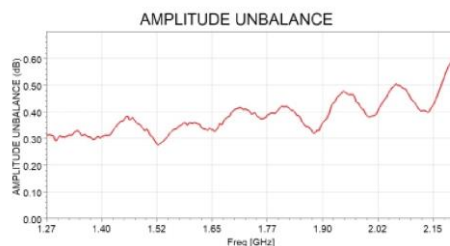
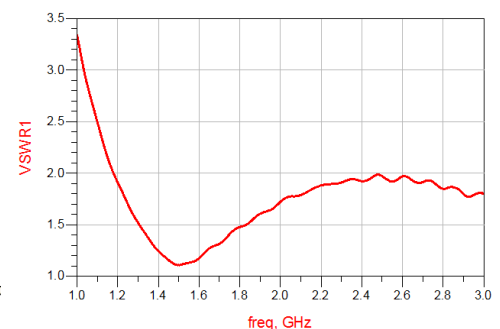
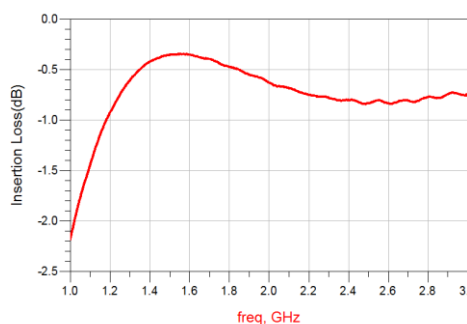
- Applied to GPS、WCDMA、PCS navigation.

Electrical Specifications⁽¹⁾ at 25°C

| Parameter | Frequency (MHz) | MIN | Typ. | MAX | Unit |
|--|-----------------|------|------|------|--------|
| Impedance Ratio (Secondary/Primary) | | | 2 | | |
| Frequency Range | | 1275 | | 2200 | MHz |
| Insertion Loss | 1275-2200 | - | 1.0 | - | dB |
| Amplitude Unbalance | 1275-2200 | - | 0.4 | - | dB |
| Phase Unbalance | 1275-2200 | - | 5.5 | - | Degree |

(1) Measured on Fenghua Characterization Test Board TB-BL2012

典型频率特性 Frequency characteristics



Notes

- The specifications are tested at 25°C±5°C, relative humidity 55~75%.
- Other quality and characteristic not specify in this datasheet. Please contact us for detail requirements.



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