

HT-BFCN-3700+



50Ω 3000 to 4600 MHz

Features

- excellent power handling
- small size
- temperature stable
- LTCC construction, and has good moisture resistance, corrosion resistance, high reliability.

Applications

- Harmonic rejection
- Transmitters / Receivers

Electrical Specifications at 25°C

| Parameter | | F# | Frequency(MHz) | Min. | Typ. | Max. | Unit |
|------------------|------------------|-------|----------------|------|------|------|------|
| Pass Band | Center Frequency | - | 3000-4600 | - | 3700 | - | MHz |
| | Insertion Loss | F1-F2 | 3000-4600 | - | 2.0 | 3.5 | dB |
| | VSWR | F1-F2 | 3000-4600 | - | 1.5 | 2.5 | :1 |
| Stop Band, Lower | Insertion Loss | DC-F3 | 2100 | 21 | 28 | - | dB |
| | VSWR | DC-F3 | 2100 | - | 23 | - | :1 |
| Stop Band, Upper | Insertion Loss | F4-F5 | 5600-8000 | 20 | 25 | - | dB |
| | VSWR | F4-F5 | 5600-8000 | - | 16 | - | :1 |

Maximum Ratings

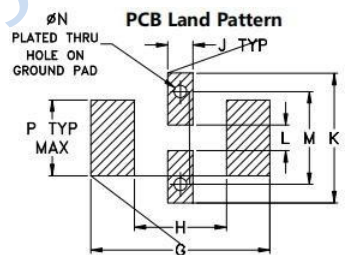
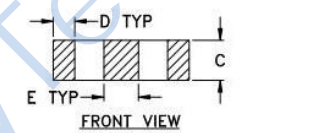
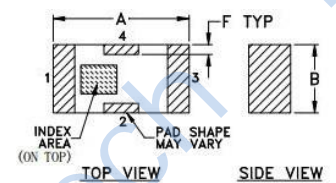
| | |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 3W .at 25°C |

*Passband rating, derate linearly to 1W at 100°C ambient
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

| | |
|--------|-----|
| RF IN | 1 |
| RF OUT | 3 |
| GROUND | 2,4 |

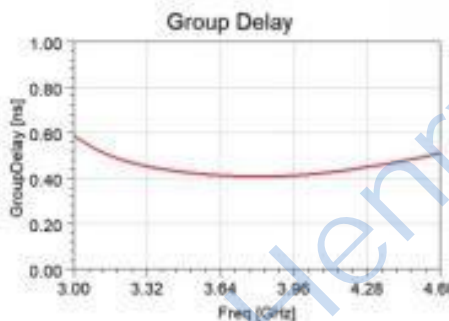
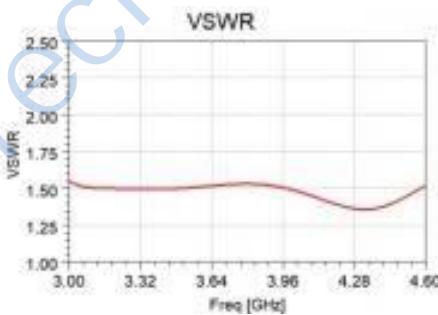
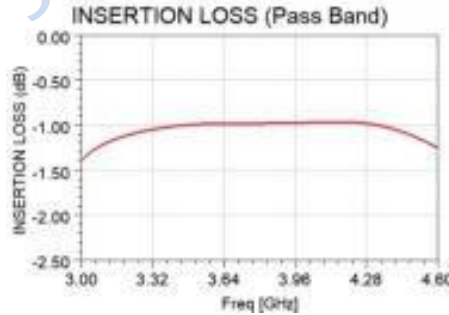
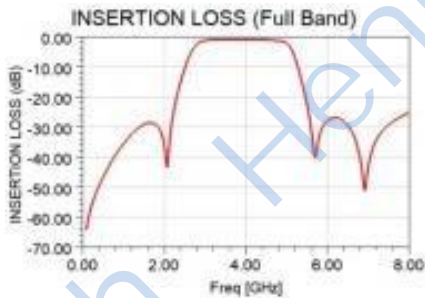
Outline Drawing



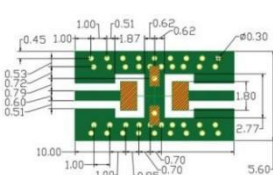
Suggested Layout
Tolerance to be within ±0.02

Outline Dimensions: Unit (mm)

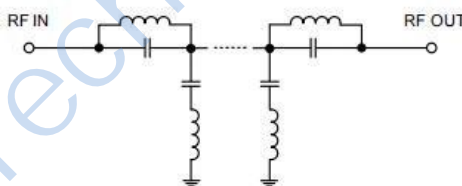
| | | | | | |
|---|------|---|------|----|-------|
| A | 3.20 | B | 1.60 | C | 0.95 |
| D | 0.51 | E | 0.81 | F | 0.23 |
| G | 4.29 | H | 2.21 | J | 0.61 |
| K | 3.10 | L | 0.61 | M | 2.21 |
| N | 0.30 | P | 1.8 | wt | 0.02g |



Suggested PCB Layout



Functional Schematic



NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015", COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.

2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK