

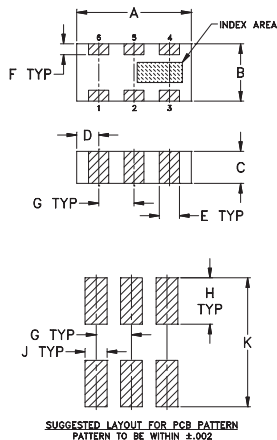
**2 Way-0° 50Ω****800 to 2700 MHz****BLUE CELL™**CASE STYLE: FV1206-1  
PRICE: \$2.50 ea. QTY (10-49)  
\$ .99 ea. QTY (100)**Maximum Ratings**

|                             |                |
|-----------------------------|----------------|
| Operating Temperature       | -55°C to 100°C |
| Storage Temperature         | -55°C to 100°C |
| Power Input (as a splitter) | 20W* max.      |

\*derate linearly to 6W at 100°C ambient.

**Pin Connections**

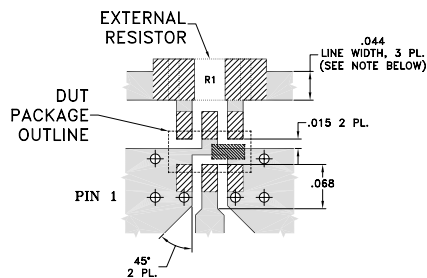
|          |                            |
|----------|----------------------------|
| SUM PORT | 2                          |
| PORT 1   | 6                          |
| PORT 2   | 4                          |
| GROUND   | 1,3,5                      |
| PORT 1-2 | resistor external 100 OHMS |

**Outline Drawing**

TOLERANCE UNLESS OTHERWISE STATED

2 PLACE DECIMALS: ±.01  
3 PLACE DECIMALS: ±.005**Outline Dimensions (inch)**

| A    | B    | C    | D     | E    | F    | G    |
|------|------|------|-------|------|------|------|
| .126 | .063 | .035 | .024  | .022 | .012 | .039 |
| 3.20 | 1.60 | 0.89 | 0.61  | 0.56 | 0.30 | 0.99 |
| H    | J    | K    | wt.   |      |      |      |
| .042 | .024 | .123 | grams |      |      |      |
| 1.07 | 0.61 | 3.12 | .020  |      |      |      |

**Demo Board MCL P/N: TB-252**  
**Suggested PCB Layout (PL-129)****NOTE:**

1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. LOCATION OF PTH'S DESIGNATED ACCORDING TO ARTWORK OF TEST BOARD B14-TB-252 (CONTACT MINI-CIRCUITS).
3. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

RESISTOR R1: 100 Ohm, 1206 SIZE

DENOTES PCB COPPER LAYOUT  
 DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

**Features**

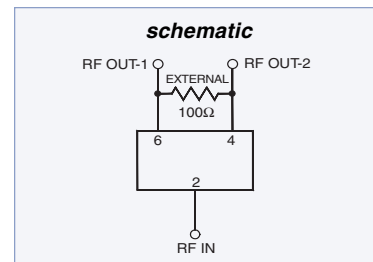
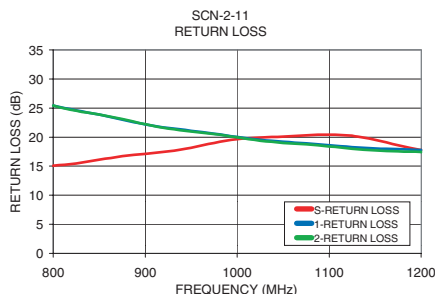
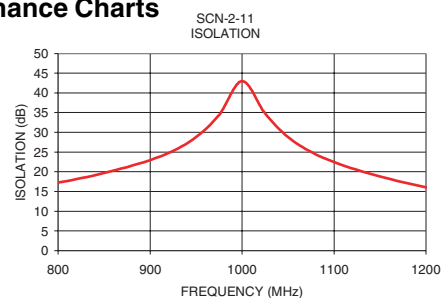
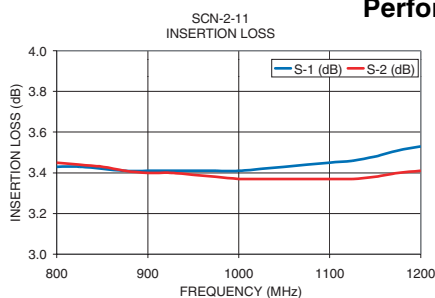
- isolation resistor, external 100 ohms
- low insertion loss, 0.4 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- very good phase unbalance, 1.0 deg. typ.
- high isolation, 22 dB typ.
- excellent power handling, 20W as splitter
- small size, 0.12"X0.06"X0.035"
- ESD non-sensitive
- temperature stable, BLUE CELL™ technology
- wrap around, solder plated terminations for excellent solderability
- low cost
- patent pending

**Applications**

- PCS, DECT
- WLAN
- GSM, GPS
- ISM applications

**Splitter Electrical Specifications**

| MODEL NO. | FREQUENCY (MHz)        | INSERTION LOSS (dB) |      | ISOLATION (dB) | PHASE UNBALANCE (Degrees) |      | AMPLITUDE UNBALANCE (dB) |      | RETURN LOSS (dB) |        |      |
|-----------|------------------------|---------------------|------|----------------|---------------------------|------|--------------------------|------|------------------|--------|------|
|           |                        | ABOVE 3.0 dB        |      |                |                           |      |                          |      | INPUT            | OUTPUT |      |
|           |                        | Typ.                | Max. |                | Typ.                      | Min. | Typ.                     | Max. | Typ.             | Max.   | Typ. |
| SCN-2-11  | 800-1175<br>875-1125   | 0.5                 | 0.8  | 20             | 15                        | 1.0  | 3.0                      | 0.1  | 0.3              | 16     | 18   |
|           |                        | 0.5                 | 0.8  | 22             | 18                        | 1.0  | 3.0                      | 0.1  | 0.3              | 16     | 20   |
| SCN-2-15  | 1100-1450<br>1200-1375 | 0.5                 | 0.8  | 23             | 17                        | 1.5  | 3.0                      | 0.25 | 0.4              | 15     | 17.5 |
|           |                        | 0.4                 | 0.7  | 25             | 20                        | 1.5  | 3.0                      | 0.2  | 0.3              | 16     | 18   |
| SCN-2-19  | 1425-1900<br>1550-1800 | 0.5                 | 0.9  | 23             | 17                        | 2.5  | 4.0                      | 0.25 | 0.4              | 15     | 18   |
|           |                        | 0.5                 | 0.9  | 25             | 20                        | 2.0  | 4.0                      | 0.2  | 0.4              | 19     | 18   |
| SCN-2-22  | 1850-2200<br>1900-2100 | 0.5                 | 0.9  | 22             | 17                        | 2.0  | 5.0                      | 0.25 | 0.4              | 16     | 19   |
|           |                        | 0.5                 | 0.9  | 24             | 20                        | 2.0  | 5.0                      | 0.2  | 0.4              | 16     | 19   |
| SCN-2-27  | 2225-2700<br>2325-2600 | 0.5                 | 1.1  | 21             | 17                        | 3.5  | 6.0                      | 0.6  | 0.8              | 19     | 17   |
|           |                        | 0.4                 | 1.0  | 23             | 20                        | 2.5  | 6.0                      | 0.4  | 0.7              | 20     | 17   |

**Performance Charts**

## Performance Charts

