

# Ultra-Small Ceramic Power Splitters/Combiners

**NEW!**  
**SCN-SERIES**

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

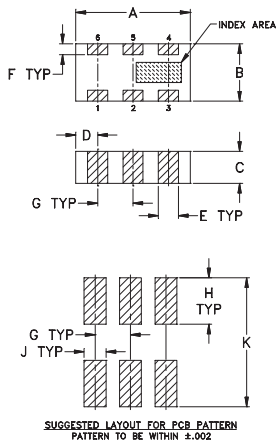
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	20W* max.

\*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

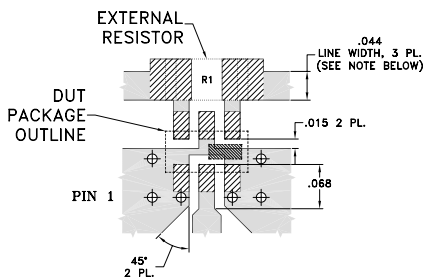


TOLERANCE UNLESS OTHERWISE STATED  
2 PLACE DECIMALS: ±.01  
3 PLACE DECIMALS: ±.005

## Outline Dimensions (inch/mm)

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)



RESISTOR R1: 100 Ohm, 1206 SIZE

- NOTE:**
- TRACE WIDTH IS SHOWN FOR ROGERS R04350 WITH DIELECTRIC THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  - LOCATION OF PTH'S DESIGNATED ACCORDING TO ARTWORK OF TEST BOARD B14-TB-252 (CONTACT MINI-CIRCUITS).
  - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

■ 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

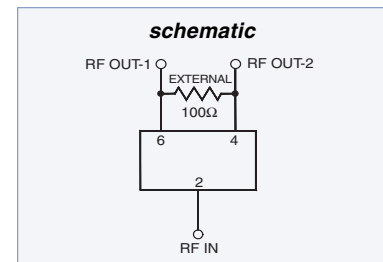
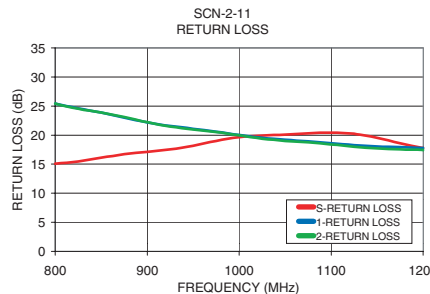
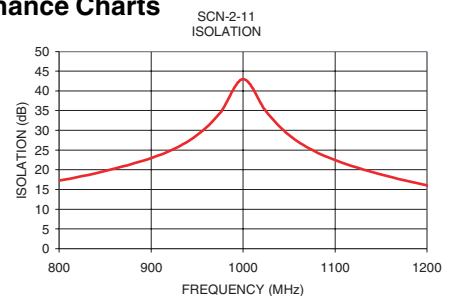
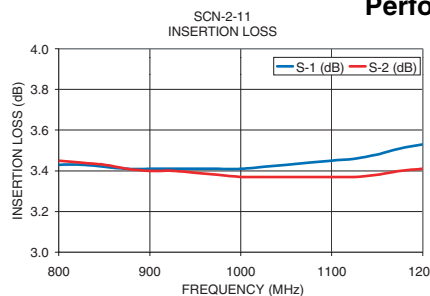
## Applications

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

## Splitter Electrical Specifications

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

## Performance Charts



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REV. A  
M86984  
SCN-2-11 ED-10710/2  
SCN-2-15 ED-10710/3  
SCN-2-19 ED-10710/4  
SCN-2-22 ED-10710/5  
SCN-2-27 ED-10710/7  
AD/DJ/CP  
030507  
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## Performance Charts

