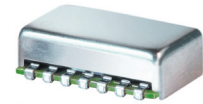


# Surface Mount Power Splitter/Combiner

## JSPQ-65W+

2 Way-90° 50Ω 5 to 65 MHz



CASE STYLE: BK276  
PRICE: \$29.95 ea. QTY. (1-9)

### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Permanent damage may occur if any of these limits are exceeded.	

### Pin Connections

SUM PORT	2
PORT 1 (0°)	6
PORT 2 (90°)	9
GROUND	1,3,4,5,7,8,10,11,12,13,14

### Features

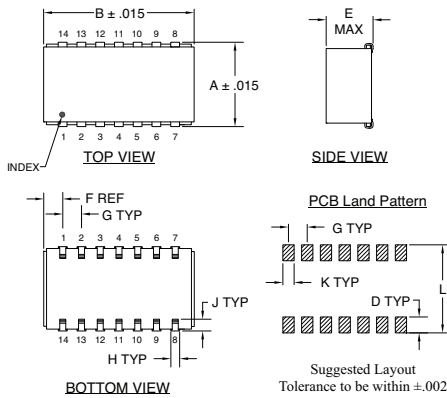
- wideband, 5 to 65 MHz
- excellent isolation, 33 dB typ.
- low insertion loss, 0.7 dB typ.
- aqueous washable

### Applications

- LMDS base station
- instrumentation
- modulators

**+RoHS Compliant**  
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

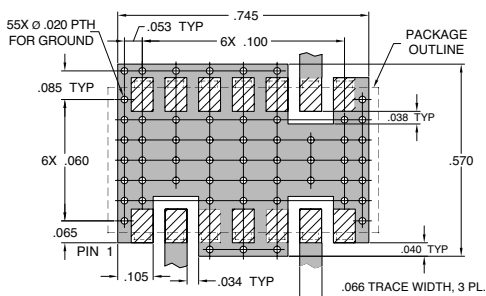
### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	
.450	.803	--	.100	.250	.102	
11.43	20.40	--	2.54	6.35	2.59	
G	H	J	K	L	wt.	
.100	.047	.065	.065	.470	grams	
2.54	1.19	1.65	1.65	11.94	3.0	

### Demo Board MCL P/N: TB-444+ Suggested PCB Layout (PL-272)



#### NOTES:

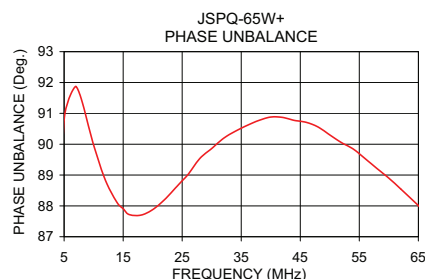
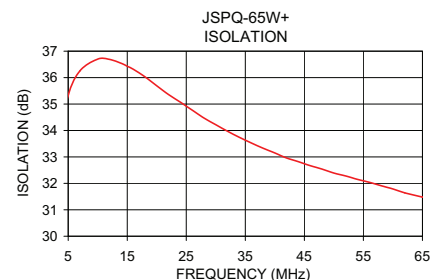
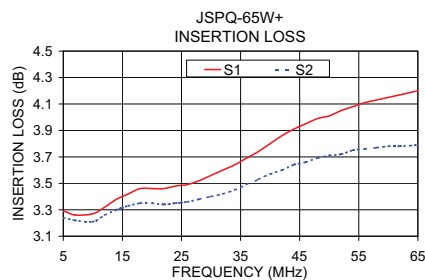
1. TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS 0.030±.002", COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)  
 DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

### Splitter Electrical Specifications

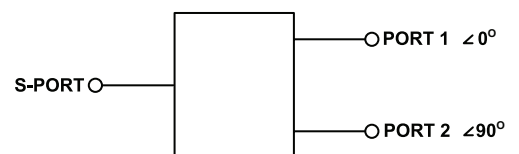
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) Avg. of coupled outputs less 3 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min.	Typ.	Max.	Max.	Max.
$f_L - f_U$	33	25	0.7	1.5	5	0.7
5 - 65						

### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
5.00	3.29	3.24	0.05	35.32	90.78	1.10	1.26	1.12
10.00	3.27	3.21	0.06	36.70	89.97	1.09	1.21	1.05
15.00	3.40	3.32	0.09	36.43	87.91	1.12	1.22	1.06
20.00	3.46	3.35	0.11	35.69	87.88	1.19	1.27	1.15
25.00	3.49	3.36	0.13	34.92	88.82	1.27	1.36	1.23
30.00	3.56	3.40	0.16	34.22	89.86	1.35	1.44	1.31
32.00	3.60	3.42	0.18	33.97	90.19	1.38	1.47	1.33
34.00	3.64	3.45	0.19	33.74	90.42	1.41	1.50	1.36
36.00	3.69	3.49	0.20	33.53	90.61	1.43	1.53	1.38
40.00	3.80	3.57	0.22	33.15	90.88	1.48	1.59	1.41
45.00	3.93	3.65	0.28	32.75	90.74	1.53	1.65	1.45
50.00	4.01	3.71	0.31	32.39	90.30	1.57	1.70	1.47
55.00	4.10	3.76	0.35	32.10	89.69	1.60	1.75	1.48
60.00	4.15	3.78	0.37	31.79	88.90	1.63	1.80	1.49
65.00	4.20	3.79	0.40	31.48	88.01	1.66	1.84	1.49



### functional schematic



**Mini-Circuits®**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED  
The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)  
I/F/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

**Notes:** 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).

REV. OR  
M112756  
EDR-4866/2F1  
JSPQ-65W+  
RAV  
121028  
Page 1 of 1