

Surface Mount

Power Splitter/Combiner

RPS-2-30+

2 Way-0° 50Ω 10 to 3000 MHz



Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.125W max.

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

SUM PORT	6
PORT 1	4
PORT 2	3
GROUND	1,2,5

Features

- wideband, 10 to 3000 MHz
- good isolation, 22 dB typ.
- small size

Applications

- instrumentation
- catv
- cellular
- PCS
- GSM

CASE STYLE: TT1413
PRICE: \$24.95 ea. QTY. (1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications

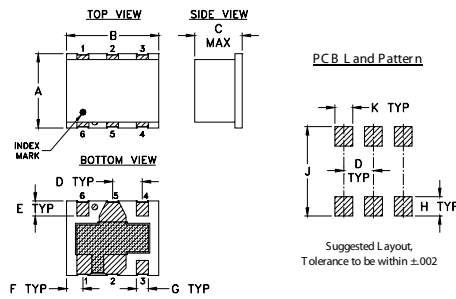
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
10-3000	19	12	22	15	15	9	0.6	1.0	0.9	1.5	1.2	2.5	2.0	4.0	8.0	0.3	0.6	1.2

L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]

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						
10.00	3.53	3.52	0.01	18.61	0.01	2.00	1.57	1.57
50.00	3.55	3.55	0.01	19.19	0.04	1.97	1.59	1.59
100.00	3.56	3.56	0.00	19.33	0.06	1.97	1.59	1.59
400.00	3.66	3.64	0.02	19.78	0.09	1.94	1.62	1.62
600.00	3.73	3.70	0.03	20.10	0.14	1.91	1.63	1.62
800.00	3.79	3.72	0.07	20.65	0.09	1.88	1.64	1.63
1000.00	3.85	3.74	0.11	21.64	0.02	1.87	1.66	1.63
1400.00	3.96	3.69	0.27	24.95	0.59	1.77	1.71	1.65
1600.00	4.00	3.66	0.34	26.31	0.88	1.74	1.72	1.64
1800.00	4.05	3.62	0.43	25.64	1.27	1.66	1.75	1.64
2000.00	4.18	3.65	0.52	23.38	1.59	1.61	1.74	1.63
2400.00	4.24	3.61	0.63	19.00	2.43	1.51	1.74	1.63
2600.00	4.32	3.65	0.67	17.42	2.83	1.54	1.75	1.64
2900.00	4.49	3.78	0.71	15.51	3.65	1.51	1.72	1.66
3000.00	4.68	3.93	0.75	15.02	4.13	1.52	1.72	1.68

Outline Drawing

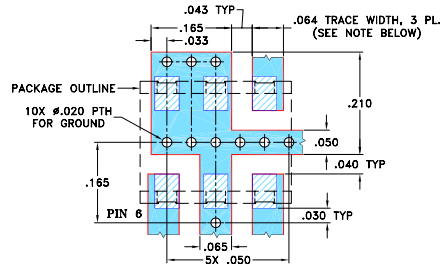


Outline Dimensions (inch/mm)

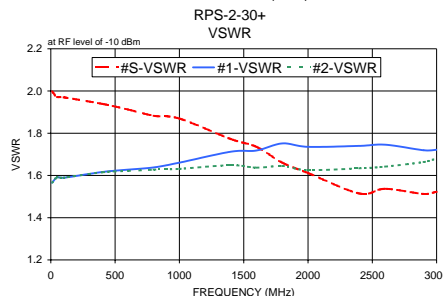
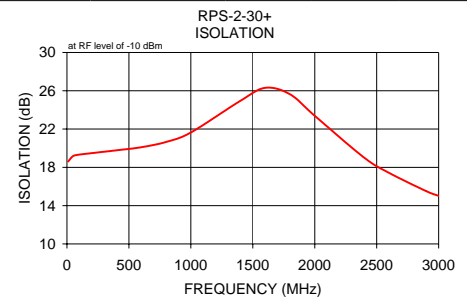
A	B	C	D	E	F	G	H	J	K	wt.
.250	.310	.20	.100	.050	.055	.040	.070	.270	.050	grams
6.35	7.87	5.08	2.54	1.27	1.40	1.02	1.78	6.86	1.27	0.5

Demo Board MCL P/N: TB-155 Suggested PCB Layout (PL-110)

SUGGESTED MOUNTING CONFIGURATION FOR TT1413 CASE STYLE, "06SP05" PIN CODE



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.030" ± 0.002"; 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



electrical schematic



For detailed performance specs & shopping online see web site

Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED
IFIRF MICROWAVE COMPONENTS

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

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.

REV.C
M108294
RPS-2-30+
EDR-5398
RVN/HY/CP/AM
090824