

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

 Available Tape and Reel
at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000, 2000

Operating Temperature	-40°C to 85°C
Storage Temperature	-65°C to 150°C
Power Input (as a splitter)	1.5W max.
Internal Dissipation	0.75W max.

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

SUM PORT	2
PORT 1	7
PORT 2	9
GROUND	1,3,4,5,6,8,10,11,12, paddle

●			
M	C	L	
G	P	2	Y
Y	Y	W	W

A	B	C	D	E	F	G	H	J
.118	.118	.035	.008	.057	.057	.009	---	.016
3.00	3.00	0.89	0.20	1.45	1.45	0.23	---	0.41
K	L	M	N	P	Q	R		wt
.020	.127	.127	.049	.010	.020	.049		grams
0.51	3.23	3.23	1.24	0.25	0.51	1.24		0.02

[illegible]

1. TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS $.020" \pm .0015"$; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
3. SIGNAL TRACES ARE NOT ALLOWED INSIDE HATCHED AREAS (APPROX. $.030 \times .030$) AT 4 PLACES AS SHOWN.

■ DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

▨ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

- wide bandwidth, 1550 to 4400 MHz
- excellent isolation, 20 dB typ.
- excellent amplitude unbalance, 0.04 dB typ.
- good phase unbalance, 0.6 deg. typ.
- small size, 0.118"x0.118"x0.035"
- high ESD level
- aqueous washable

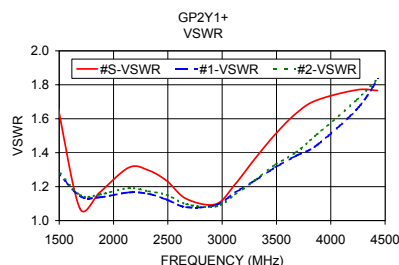
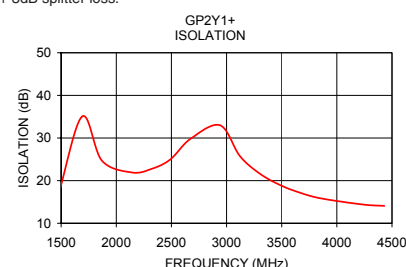
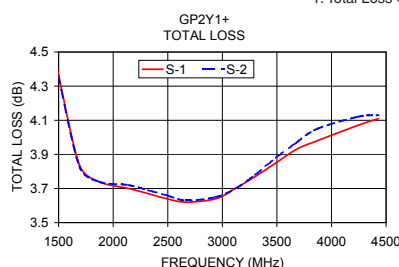
- WCDMA
- radar
- instrumentation
- WiMax
- DCS
- navigation
- Korea PCS

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS* (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1) Typ.	
f _c -f _u	Typ.	Min.	Typ.	Max.	Max.	Max.	Port S	Ports 1,2
1550-4400	20	12	1.0	1.9	6.0	0.3	1.4	1.4

* De-embedded from demo board loss.

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1470.00	4.45	4.44	0.01	16.20	0.33	1.73	1.30	1.31
1690.00	3.84	3.83	0.01	35.04	0.41	1.07	1.15	1.15
1870.00	3.74	3.74	0.00	24.68	0.47	1.16	1.14	1.15
2140.00	3.70	3.72	0.02	21.93	0.54	1.31	1.17	1.19
2320.00	3.67	3.69	0.02	22.75	0.57	1.30	1.16	1.17
2490.00	3.64	3.66	0.02	24.97	0.59	1.23	1.12	1.15
2670.00	3.62	3.63	0.01	29.75	0.51	1.13	1.08	1.10
2940.00	3.64	3.65	0.00	33.00	0.45	1.10	1.09	1.08
3120.00	3.70	3.70	0.00	25.78	0.45	1.21	1.17	1.15
3300.00	3.77	3.78	0.01	21.67	0.49	1.36	1.24	1.24
3490.00	3.85	3.88	0.03	18.91	0.64	1.51	1.31	1.33
3680.00	3.93	3.97	0.04	17.04	0.71	1.63	1.38	1.40
3870.00	3.98	4.05	0.07	15.77	0.85	1.71	1.44	1.51
4240.00	4.07	4.12	0.05	14.38	1.01	1.77	1.66	1.71
4430.00	4.11	4.13	0.01	14.09	0.95	1.77	1.83	1.83

1. Total Loss = Insertion Loss + 3dB splitter loss



A diagram of a black box system. On the left, a horizontal line with a small circle at its end is labeled "PORT S". This line enters a large, empty square box. On the right side of the box, two horizontal lines exit, each ending in a small circle. The top line is labeled "PORT" and the bottom line is also labeled "PORT".

Human Body Model (HBM): Class 1A (250 to < 500V) in accordance with ANSI/ESD STM 5.1 - 2001
Machine Model (MM): Class M2 (100V to < 250V) in accordance with ANSI/ESD STM 5.2 - 1999

Notes:

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document 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