Power Splitter/Combiner

2 Way-0°

 50Ω

1600 to 3300 MHz

CASE STYLE: DQ1225

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site

Maximum Ratings

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						

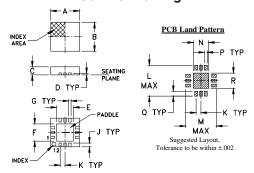
Pad Connections

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

Product Marking



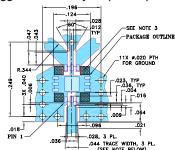
Outline Drawing



Outline Dimensions (inch)

	.118	.035		.057	.057	.009	H J
3.00	3.00	0.89	0.20	1.45	1.45	0.23	0.41
K	L	M	N	Р	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

Demo Board MCL P/N: TB-453-GP2Y+ Suggested PCB Layout (PL-282)



DIES:

TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .020" ± .0015"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE. SIGNAL TRACES APE NOT ALLOWED INSIDE HATCHED AREAS (APPROX. .030 X .030) AT 4 PLACES AS SHOWN.

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

Features

- wide bandwidth, 1600 to 3300 MHz
- excellent isolation, 24 dB typ.
- excellent amplitude unbalance, 0.02 dB typ.
- good phase unbalance, 0.3 deg. typ.
- small size, 0.118"x0.118"x0.035"
- high ESD level
- · aqueous washable

Applications • WCDMA

- DCS
- radar navigation
- instrumentation Korea PCS
- WiMax

for RoHS Compliance methodologies and qualifications

Available Tape and Reel at no extra cost Reel Size Devices/Reel

20, 50, 100, 200, 500, 1000, 2000

Electrical Specifications

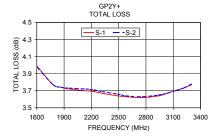
FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS* (dB) ABOVE 3.0 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1) Typ.	
f _L -f _U	Typ. Min.	Тур. Мах.	Max.	Max.	Port S	Ports 1,2
1600-3300	24 17	0.8 1.5	4.0	0.2	1.2	1.2

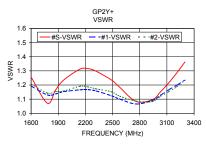
De-embedded from demo board loss.

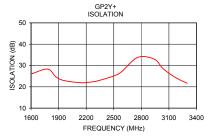
Typical Performance Data

Frequency Total Loss¹ (MHz) (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2	
	S-1	S-2	` ,		(),			
1600.00	3.99	3.98	0.01	26.03	0.38	1.26	1.19	1.21
1780.00	3.77	3.77	0.00	28.31	0.44	1.07	1.13	1.14
1870.00	3.74	3.74	0.00	24.68	0.47	1.16	1.14	1.15
1960.00	3.72	3.73	0.01	22.92	0.47	1.24	1.15	1.16
2140.00	3.70	3.72	0.02	21.93	0.54	1.31	1.17	1.19
2230.00	3.69	3.71	0.02	22.14	0.58	1.32	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
2580.00	3.63	3.64	0.01	26.91	0.55	1.18	1.10	1.12
2760.00	3.62	3.63	0.01	33.79	0.51	1.08	1.07	1.09
2940.00	3.64	3.65	0.00	33.00	0.45	1.10	1.09	1.08
3030.00	3.67	3.67	0.00	28.80	0.45	1.15	1.13	1.12
3120.00	3.70	3.70	0.00	25.78	0.45	1.21	1.17	1.15
3210.00	3.73	3.73	0.00	23.47	0.46	1.29	1.20	1.19
3300.00	3.77	3.78	0.01	21.67	0.49	1.36	1.24	1.24

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









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

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-Circuits tapplicable established test performance criteria and measurement instructions.

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