

Surface Mount

Power Splitter/Combiner

2 Way-90° 50Ω 95 to 200 MHz

ADQ-22+



CASE STYLE: CJ725

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

SUMPORT	1
PORT 1 (0°)	5
PORT 2 (+90°)	8
GROUND EXTERNAL	2,3,6,7
50 OHM TERM EXTERNAL	4

Features

- low insertion loss, 0.3 dB typ.
- high isolation, 28 dB typ.
- excellent VSWR, 1.10 typ.
- small size surface mount

Applications

- point to point microwave link

+RoHS Compliant

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

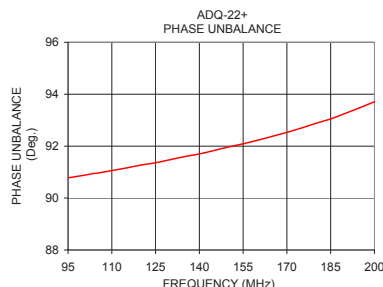
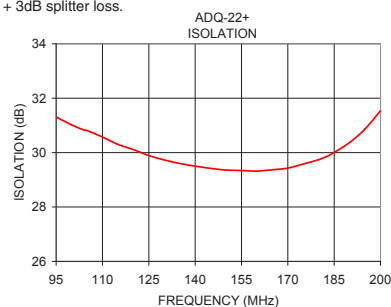
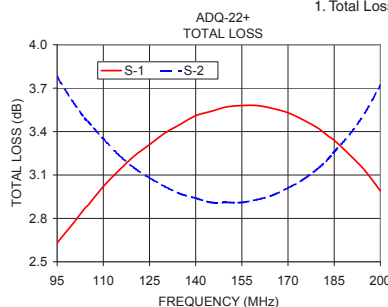
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) Avg. of Coupled Outputs ABOVE 3 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)
f_L - f_U	Typ. Min.	Typ. Max.	Typ. Max.	Typ. Max.	S-Port Typ. Output Typ.
95-200	28 24	0.3 0.6	2 6	0.7 1.6	1.1 1.1

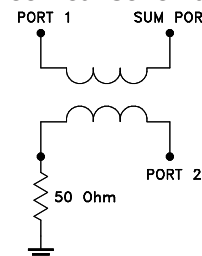
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)	Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1 S-2						
95.00	2.63 3.78	1.15	31.31	90.78	1.09	1.09	1.06
100.00	2.76 3.61	0.85	31.02	90.87	1.09	1.09	1.06
105.00	2.89 3.47	0.57	30.81	90.96	1.09	1.09	1.06
110.00	3.02 3.35	0.33	30.57	91.06	1.09	1.09	1.06
120.00	3.23 3.15	0.08	30.11	91.27	1.10	1.10	1.06
130.00	3.39 3.02	0.37	29.73	91.48	1.10	1.10	1.06
140.00	3.51 2.94	0.57	29.50	91.70	1.10	1.10	1.06
150.00	3.57 2.91	0.66	29.36	91.97	1.10	1.10	1.06
160.00	3.58 2.93	0.65	29.32	92.23	1.10	1.10	1.06
170.00	3.53 3.01	0.52	29.43	92.53	1.11	1.11	1.05
180.00	3.42 3.15	0.26	29.74	92.88	1.11	1.11	1.05
185.00	3.34 3.26	0.08	30.01	93.05	1.11	1.10	1.05
190.00	3.24 3.38	0.14	30.37	93.26	1.11	1.10	1.05
195.00	3.13 3.53	0.41	30.87	93.48	1.11	1.10	1.04
200.00	2.99 3.72	0.72	31.54	93.71	1.11	1.10	1.04

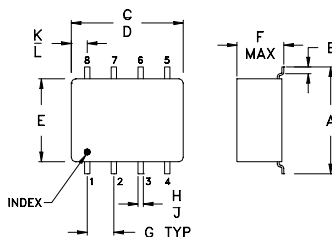
1. Total Loss = Insertion Loss + 3dB splitter loss.



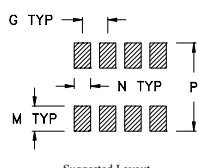
electrical schematic



Outline Drawing



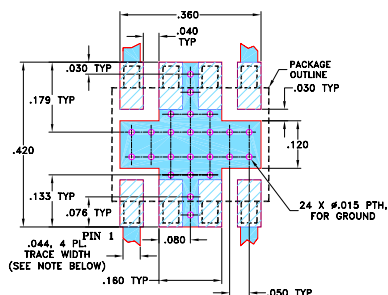
PCB Land Pattern



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	
.397	.032	.385	.435	.310	.215	.100	
10.08	0.81	9.78	11.05	7.87	5.46	2.54	
H	J	K	L	M	N	P	wt
.015	.025	.035	.075	.120	.060	.420	grams
0.38	0.64	0.89	1.91	3.05	1.52	10.67	0.45

Demo Board MCL P/N: TB-83 Suggested PCB Layout (PL-063)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.020" ± 0.0015". 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.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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.
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Page 1 of 1