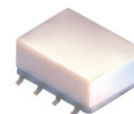


# Surface Mount Power Splitter/Combiner

## ADQ-32+

2 Way-90° 50Ω 160 to 327 MHz



### Maximum Ratings

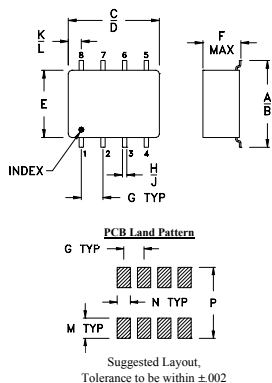
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.

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

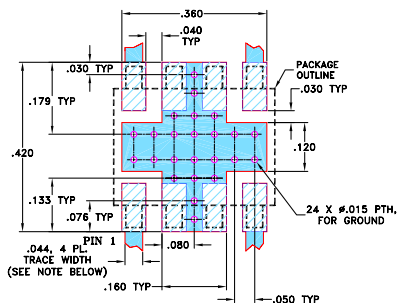
### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
.345	.400	.385	.435	.310	.215	.100	.015	.025	.035	.075	.120	.060	.420	grams
8.76	10.16	9.78	11.05	7.87	5.46	2.54	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.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
  - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

### Features

- low insertion loss, 0.3 dB typ.
- high isolation, 22 dB typ.
- good VSWR, 1.22 typ.
- small size surface mount

### Applications

- point to point microwave link

CASE STYLE: CJ725  
PRICE: \$9.35 ea. QTY (1-9)

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

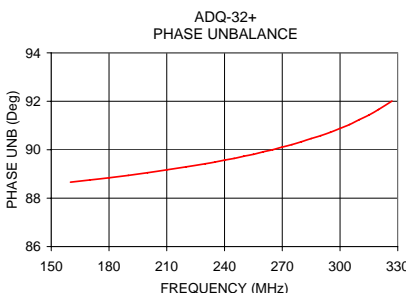
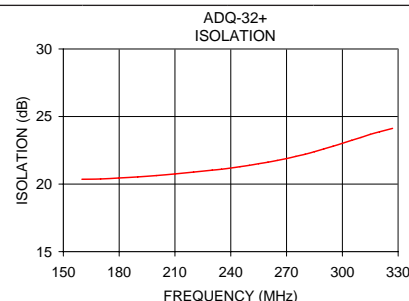
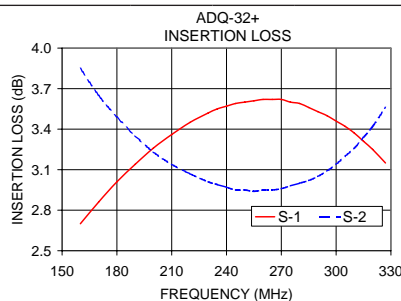
The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

### Electrical Specifications

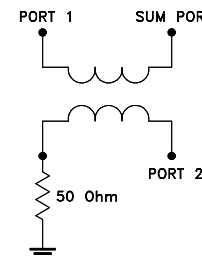
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) Avg. of Coupled Outputs less 3 dB		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		VSWR (:1)	
	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	S-Port Typ.	Output Typ.
f <sub>L</sub> -f <sub>U</sub>	22	18	0.3	0.7	1	5	0.6	1.6	1.22	1.22
160-327										

### 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						
160.00	2.70	3.85	1.15	20.36	88.66	1.23	1.23	1.25
170.00	2.86	3.65	0.80	20.38	88.75	1.22	1.23	1.25
180.00	3.01	3.49	0.48	20.45	88.84	1.22	1.22	1.24
190.00	3.14	3.35	0.21	20.53	88.94	1.21	1.21	1.24
200.00	3.26	3.23	0.02	20.63	89.05	1.20	1.20	1.23
220.00	3.45	3.07	0.38	20.89	89.29	1.19	1.19	1.21
240.00	3.57	2.97	0.60	21.19	89.57	1.18	1.18	1.20
260.00	3.62	2.95	0.67	21.62	89.91	1.17	1.17	1.19
270.00	3.62	2.96	0.65	21.89	90.11	1.16	1.16	1.18
280.00	3.59	3.00	0.59	22.21	90.33	1.15	1.15	1.17
290.00	3.53	3.05	0.48	22.60	90.58	1.15	1.15	1.17
300.00	3.46	3.14	0.32	23.02	90.88	1.14	1.14	1.16
310.00	3.37	3.26	0.10	23.45	91.24	1.13	1.13	1.15
320.00	3.25	3.42	0.18	23.87	91.66	1.12	1.12	1.14
327.00	3.15	3.56	0.41	24.12	92.01	1.11	1.12	1.13



### electrical schematic



For detailed performance specs & shopping online see web site

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HY1Z/CP  
090824