



Mini-Circuits®

SURFACE MOUNT

Power Splitter/Combiner

ADQ-32W+

2 Way-90° 50Ω 104 to 340 MHz

FEATURES

- Wideband, 104 to 340 MHz
- Good Isolation, 20 dB Typ.
- Good VSWR, 1.24 Typ.
- Small Size Surface Mount



Generic photo used for illustration purposes only

CASE STYLE: CJ725

+RoHS Compliant

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

APPLICATIONS

- Point to Point Microwave Link
- VHF/UHF Receivers/Transmitters

ELECTRICAL SPECIFICATIONS

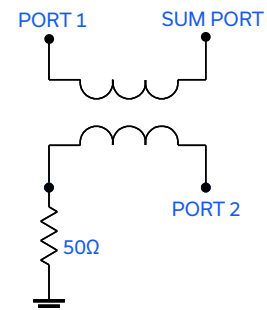
Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range			104		340	MHz
Insertion Loss Avg. of Coupled Outputs above 3 dB		104-340		0.6	0.9	dB
Isolation		104-340	16	20		dB
Phase Unbalance		104-340		3	8	Degree
Amplitude Unbalance		104-340		0.8	1.8	dB
VSWR	S-Port	104-340		1.22		:1
	Output	104-340		1.25		

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
Power Input (as a Splitter)	0.5 W Max.

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

ELECTRICAL SCHEMATIC



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ECO-019621
ADQ-32W+
MCL NY
251103

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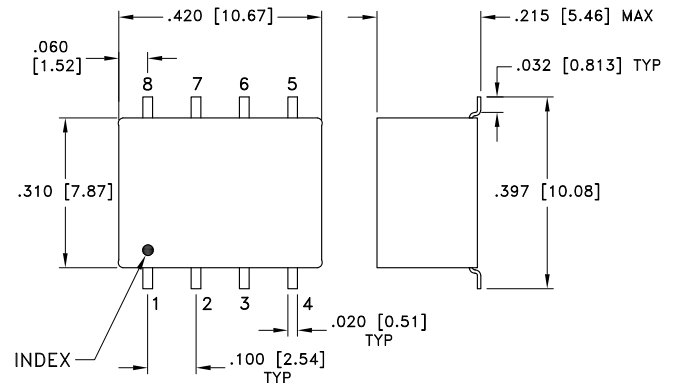
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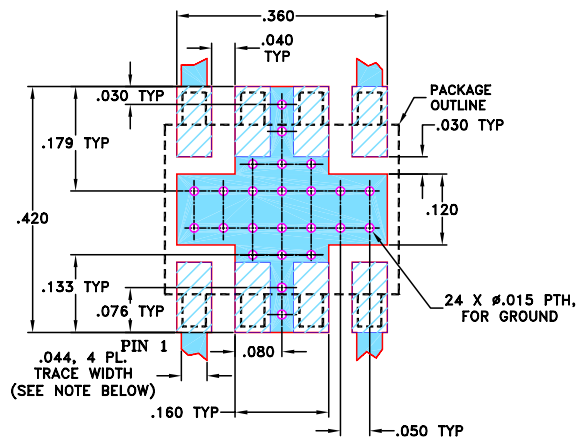
PIN CONNECTIONS

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

OUTLINE DRAWING

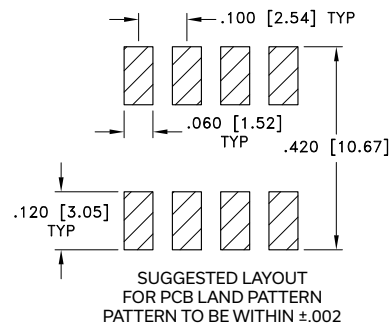


PRODUCT MARKING: ADQ-32W+

DEMO BOARD MCL P/N: TB-ADQ-32W+
SUGGESTED PCB LAYOUT (PL-063)

- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS $0.020" \pm 0.0015"$. 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

SUGGESTED LAYOUT
FOR PCB LAND PATTERN
PATTERN TO BE WITHIN ± 0.002  METALLIZATION

Weight: .40 gram

Dimensions are in inches [mm]. Tolerances: 2 Pl. ± 0.01 ; 3Pl. ± 0.005 Inch

Notes:

1. Case material: Plastic.
2. Termination Finish: Tin plate over Nickel plate.

TAPE & REEL INFORMATION: F10



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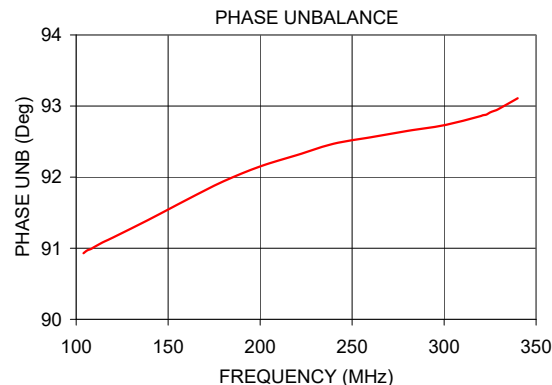
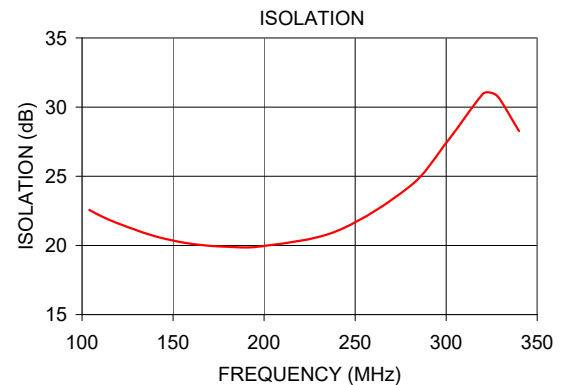
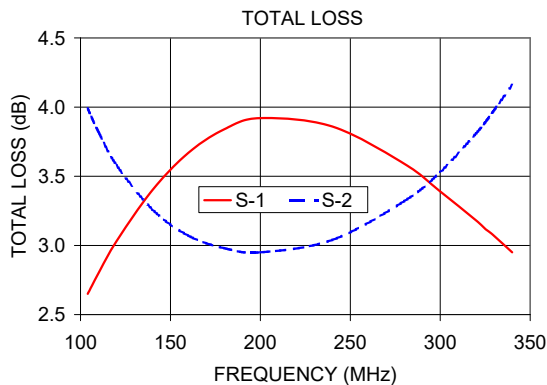
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TYPICAL PERFORMANCE DATA

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR (:1)		
	S-1	S-2				S	1	2
104	2.65	3.99	1.34	22.56	90.93	1.20	1.22	1.22
106	2.70	3.93	1.23	22.43	90.97	1.20	1.22	1.22
110	2.80	3.82	1.02	22.15	91.02	1.20	1.22	1.22
120	3.03	3.58	0.55	21.58	91.15	1.20	1.22	1.23
140	3.40	3.26	0.14	20.67	91.41	1.21	1.23	1.23
160	3.67	3.07	0.60	20.12	91.68	1.21	1.24	1.24
180	3.84	2.98	0.87	19.90	91.94	1.20	1.25	1.25
200	3.92	2.95	0.98	19.96	92.15	1.19	1.25	1.25
240	3.86	3.04	0.82	21.04	92.47	1.17	1.24	1.24
280	3.59	3.32	0.27	24.27	92.65	1.12	1.20	1.22
300	3.39	3.53	0.14	27.41	92.73	1.08	1.16	1.19
320	3.18	3.81	0.63	30.93	92.86	1.05	1.12	1.17
325	3.12	3.89	0.77	31.02	92.91	1.05	1.11	1.17
329	3.08	3.96	0.88	30.66	92.95	1.05	1.10	1.17
340	2.95	4.16	1.21	28.27	93.11	1.07	1.08	1.17

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



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/terms/viewterm.html

