

QCN-34+

CASE STYLE F·EV1206-1

* Derate linearly to 7W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded

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

Figure 1: Suggested Layout.

The diagram shows a rectangular PCB land pattern with the following dimensions and features:

- Dimensions:**
 - $A \pm .006$: Width of the central regions (4 and 5).
 - $B \pm .006$: Height of the left regions (1 and 2).
 - $C \pm .007$: Height of the right regions (3 and 6).
 - D REF: Width of the right regions (3 and 6).
 - $E \pm .006$ TYP: Width of the left regions (1 and 2).
 - $F \pm .007$ TYP: Height of the top regions (4 and 5).
 - G TYP: Width of the right regions (3 and 6).
 - H TYP: Height of the left regions (1 and 2).
 - J TYP: Height of the right regions (3 and 6).
 - K : Total height of the land pattern.
- Regions:** The land pattern is divided into six numbered regions (1-6) and an index area.
- Index Area:** Labeled "INDEX AREA (ONTOP)".
- Pad Shape:** Noted as "PAD SHAPE MAY VARY".
- Markings:** "ALPHA-NUMERIC MARKINGS MAY APPEAR (ONTOP)".

A	B	C	D	E	F
.126	.063	.035	.024	.022	.011
3.20	1.60	0.89	0.61	0.56	0.28
G	H	J	K		wt
.039	.024	.042	.123		grams
0.99	0.61	1.07	3.12		.020

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

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 remedy and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MC/Store/terms.iso

- low insertion loss, 0.4 dB typ.
- high isolation, 30 dB typ.
- wrap-around terminal for excellent solderability
- ultra small, 0.12"X0.06"X0.035"
- patent pending

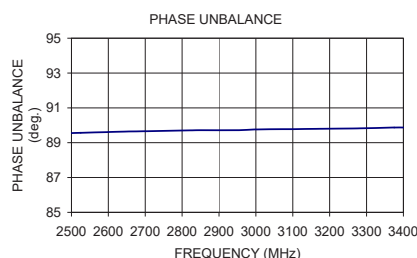
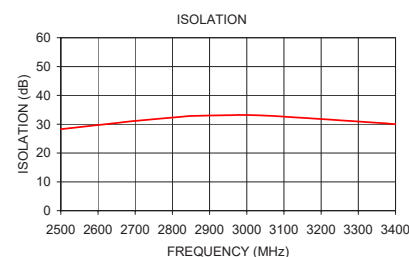
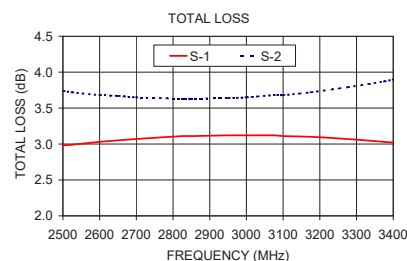
- balanced amplifiers
- modulators
- MMDS
- defense communications

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.	Typ.
2500-3400					
2500-2800	32 23	0.4 0.6	1 3	0.4 0.9	1.15
2800-3400	26 20	0.5 0.7	1 4	0.5 1.2	1.15

1. For applications requiring DC voltage to be applied to the RF ports, add suffix letter "D" to part no.
DC resistance to ground is 100 Mohms min.

Frequency (MHz)	Total Loss¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
2500.00	2.98	3.74	0.76	28.30	89.55	1.07	1.08	1.07
2525.00	2.99	3.72	0.73	28.62	89.57	1.07	1.08	1.07
2600.00	3.03	3.68	0.65	29.72	89.61	1.06	1.07	1.05
2650.00	3.05	3.67	0.61	30.42	89.64	1.05	1.06	1.04
2700.00	3.07	3.65	0.58	31.14	89.66	1.04	1.06	1.03
2825.00	3.11	3.63	0.52	32.59	89.71	1.03	1.05	1.02
2850.00	3.11	3.63	0.52	32.87	89.72	1.03	1.05	1.02
2950.00	3.12	3.64	0.52	33.11	89.72	1.02	1.04	1.03
3000.00	3.12	3.65	0.53	33.20	89.76	1.02	1.04	1.03
3075.00	3.12	3.68	0.56	32.83	89.78	1.02	1.03	1.04
3100.00	3.11	3.68	0.57	32.62	89.78	1.02	1.03	1.05
3175.00	3.10	3.72	0.62	32.01	89.80	1.03	1.02	1.05
3275.00	3.07	3.79	0.72	31.16	89.82	1.04	1.02	1.06
3375.00	3.03	3.87	0.84	30.26	89.87	1.05	1.01	1.07
3400.00	3.02	3.90	0.88	29.99	89.87	1.05	1.01	1.08

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



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