

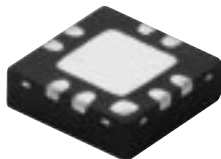
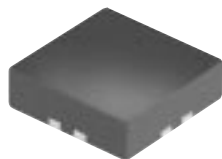
Surface Mount

Monolithic Amplifier

50Ω, 1.5 to 5.9 GHz

MNA-7

NEW!



CASE STYLE: DQ849

PRICE: \$2.25 ea.
QTY. (30)

Features

- 3V & 5V operation
- micro-miniature size .120"x.120"
- no external biasing circuit required
- high directivity, 24 dB typ.
- wide bandwidth, 1.5 to 5.9 GHz
- low noise figure, 6.0 dB typ.
- output power, up to +15.6 dBm typ.
- low cost

Applications

- buffer amplifier
- cellular
- communication satellite
- line of sight links
- defense

Electrical Specifications at T_{AMB}=25°C

MODEL NO.	FREQ. (GHz)	DC VOLTS (V)	GAIN, dB Typical						MAXIMUM POWER, dBm		DYNAMIC RANGE			VSWR (:1) Typ.*	DIRECTIVITY (dB) (Isolation-Gain)	DC OPERATING CURRENT @ Pin 3 (mA)		THERMAL RESISTANCE θjc typ. °C/W				
			over frequency, GHz						Min. at 2.0 GHz	Output (1 dB Comp.) Typ.		NF dB Typ. at 2.0 GHz	IP3 dBm Typ. at 5.9 GHz			In	Out		Typ.	Typ.	Max.	
			1.5	2.0	3.5	5.0	5.9	f _L		f _U	at 2.0 GHz		at 2.0 GHz									at 5.9 GHz
MNA-7	1.5-5.9	5.0 2.8	15.9 13.7	17.2 15.4	17.4 15.8	17.2 16.7	10.8 9.8	15 —	15.6 12.7	15.9 13.1	6.9 6.9	28.4 24.1	28.6 23.8	2.0 2.0	1.5 1.5	20 24	73 65	96 —	78			

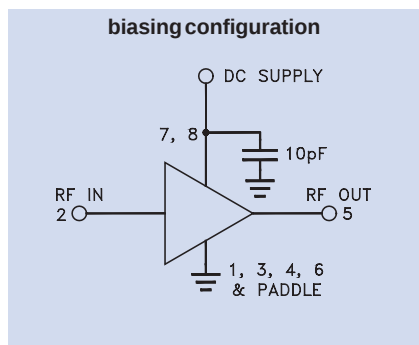
* Below 2.5 GHz: see graph.

Maximum Ratings

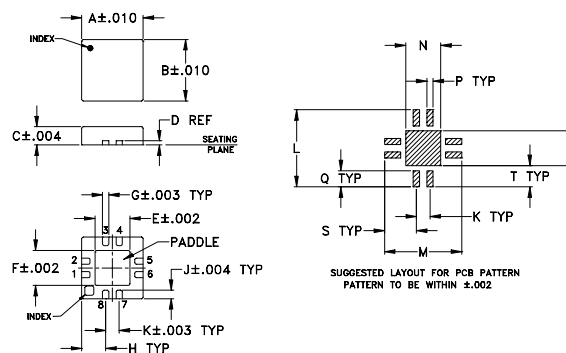
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
DC Voltage	7V at pins 7&8 10V at pins 2&5
Power	500mW
Input Power (no damage)	10 dBm

Pin Configuration

RF IN	2
RF OUT	5
DC	7,8 connected together externally
GND EXT.	1,3,4,6 and paddle in center of bottom



Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	J	
.118	.118	.035	.008	.067	.067	.012	.046	.016	
3.00	3.00	0.89	0.20	1.70	1.70	0.30	1.17	0.41	
K	L	M	N	P	Q	R	S	T	wt.
.026	.148	.148	.067	.012	.031	.067	.061	.041	grams
0.66	3.76	3.76	1.70	0.30	0.79	1.70	1.55	1.04	.06

designers kit available

KIT No.	No. of Units in KIT	Description	Price \$ per KIT
K1-MNA	40	10 of each: MNA-2, -3, -5, -6	69.95
K2-MNA	60	10 of each: MNA-2, -3, -4, -5, -6, -7	99.95

REV. OR
M81737
ED-9640A/7
MNA-7
FL/TD/CP
020613
page 1 of 2

INTERNET <http://www.minicircuits.com>

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

ISO 9001 CERTIFIED

