

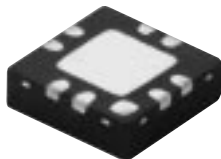
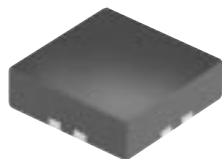
Surface Mount

Monolithic Amplifier

50Ω, 0.5 to 2.5 GHz

MNA-2

NEW!



CASE STYLE: DQ849
PRICE: \$1.90 ea.
QTY. (30)

Features

- 3V & 5V operation
- micro-miniature size .120"x.120"
- no external biasing circuit required
- high directivity, 20 dB typ.
- wide bandwidth, 0.5 to 2.5 GHz
- low noise figure, 5.4 dB typ.
- output power, up to +17.7 dBm typ.
- excellent repeatability
- low cost

Applications

- buffer amplifier
- cellular
- PCN

Electrical Specifications at T_{AMB}=25°C

MODEL NO.	FREQ. (GHz) f _L - f _U	DC VOLTS (V)	GAIN, dB Typical						MAXIMUM POWER, dBm		DYNAMIC RANGE			VSWR* (:1) Typ.	DIRECTIVITY (dB) (Isolation-Gain) Typ.	DC OPERATING CURRENT @ Pin 3 (mA)		THERMAL RESISTANCE θ _{Jc} typ. °C/W	
			over frequency, GHz						Min. at 2 GHz	Output (1 dB Comp.) Typ.		NF dB Typ. at 1 GHz	IP3 dBm Typ. at 2 GHz			Typ. Max.			
			0.5	1.0	1.5	2.0	2.5	f _L		f _U	at 1 GHz		at 2 GHz						
MNA-2	0.5-2.5	5.0 2.8	10.6 9.6	12.8 11.5	12.8 11.2	12.3 10.7	11.9 10.2	10.3 —	17.7 12.9	14.9 12.4	5.4 5.4	26.5 23.2	28 24.2	1.5 1.5	1.6 1.6	20 20	65 60	95 —	78

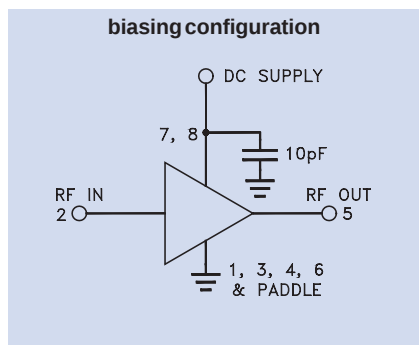
*VSWR above .75 GHz

Maximum Ratings

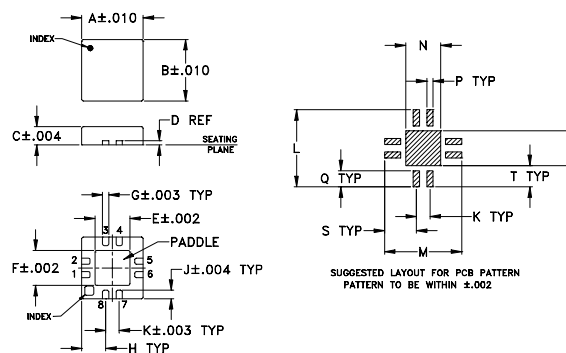
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
DC Voltage	7V at pins 7&8 10V at pins 2&5
Power	500mW
Input Power (no damage)	10 dBm

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. B
M81737
ED-9640A/2
MNA-2
FL/TD/CP
020613
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