

M1822GP60 1800 – 2200 MHz / 60 Watts

ELECTRICAL SPECIFICATIONS @ +28 VDC, 25°C, 50 Ω System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	1800		2200	MHz
Output Power CW	P _{SAT}	60	70		Watt
Output Power @ 1dB Gain Compression	P _{1dB}	45			Watt
Power Gain 1dB Gain Compression	G _{1dB}	48			dB
Input Power for Rated P _{SAT}	P _{IN}		0		Watt
Gain Flatness	ΔG			±1.5	dB
Input/Output Return Loss	S ₁₁ / S ₂₂			-14	dB
Noise Figure	NF		7	10	dB
Harmonics @ P _{OUT} = 25W	H		-40		dBc
Third Order Intercept Point 2-Tone @ 34dBm/Tone, 100kHz Spacing	IP3		+57		dBm
Spurious Signals	Spur			-60	dBc
Operating Voltage	V _{DC}	26	28	30	Volt
Current consumption @ P _{out} = 60W	I _{DD}			9.0	Amp

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit	Limits
Operating Case Temperature	T _c	0		+50	°C	
Storage Temperature	T _{STG}	-40		+85	°C	
Relative humidity (non-condensing)	RH			95	%	
Altitude (MIL-STD-810F Method 500.4)	ALT			30,000	Feet	
Vibration/Shock MIL-STD-810F Method 514.5/516.5 – Proc I	VI/SH		Airborne			

LIMITS

Parameter	Value	Limits
Input RF drive level without damage	+6dBm	Max
Load VSWR @ P _{out} = 20W	∞ @ all phase & amplitude for duration of 1 minute 3:1 @all load phase & amplitude continuous	
Thermal Overload	85°C shutdown	Max

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	6.4 X 3.4 X 1.0	Inch	Max
Weight	1.0	lb.	Max
RF Connectors In/Out	Type-SMA, Female		
DC / Shutdown	D-Sub 9-Pin, Male		
Cooling	External Heatsink (not supplied)		

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DC CONNECTOR- D-Sub, 9Pin, Male

Pin #	Description	Specifications
1	Forward	Continuous Analog voltage 0-5VDC relative to forward power level
2	Reverse	Continuous Analog voltage 0-5VDC relative to reflected power level
3	ALC ON/OFF	ALC OFF = TTL Logic High (5V) (Internally Pulled-low)
4	ALC Level	Continuous 27 – 45 dBm adjustable range via 0 – 5 VDC Analog levels Maximum Gain: 5VDC, Minimum Gain: 0VDC
5	Mute	Amplifier Disable: TTL Logic High (5V) (Internally Pulled-Low)
6,7	VDD	+28V _{DC} ±2V
8,9	GND	Ground

LED	LED Indicator	Output Power level indicator referenced to ALC setting
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Outline Drawing

