

M0527BP100 500 – 2700 MHz / 100 Watts

ELECTRICAL SPECIFICATIONS @ +30V_{DC}, 25°C, 50Ω System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	500		2700	MHz
Output Power CW	P _{SAT}	100			Watt
Output Power @ 1dB Gain Compression Point	P _{1dB}		50		Watt
Small Signal Gain	G _{SS}		54		dB
Gain Flatness @ Rated Output Power	ΔG _{SS}		±1.0		dB
Input power @ Rated P _{OUT}	P _{IN}		0		dBm
Input Return Loss	S ₁₁			-10	dB
Noise Figure	NF		10		dB
Third Order Intercept Point 2-Tone @ 39dBm/Tone, Δ = 100KHz	IP3		50		dBm
Harmonics @ Rated Output Power	2 nd / 3 rd		-20		dBc
Spurious Signals	S _{PUR}			-60	dBc
Operating Voltage	V _{DC}		30		Volt
Current Consumption @ Rated P _{OUT}	I _{DD}		11	13	Amp
Current Consumption @ Shutdown	I _{SD}			600	mA
Switching Time @ 1kHz TTL, P _{IN} = 0 dBm	T _{ON/OFF}		2	5	μSec

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit	Limits
Operating Case Temperature	T _C	-20		+70	°C	
Storage Temperature	T _{STG}	-40		+85	°C	
Relative humidity (non-condensing)	RH	~95			%	

LIMITS

Parameter	Value	Limits
Input RF drive level without damage	+10dBm	Max
Load VSWR @ Rated Output Power	∞ @ all load phase & amplitude for duration of 1 minute 3:1 All Phase and Amplitude continuous	
Thermal Overload	Graceful degradation @ Shutdown 85°C	Max

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	208.3 x 91.5 x 27	mm	Max
Weight	TBD	Kg	Typ
RF Connectors In/Out	Input : SMA (Female) / Output : SMA (Female)		
DC / Shutdown	D-Sub, 9-Pin, Male		
Cooling	External Heatsink		

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DC CONNECTOR- D-Sub, 9-Pin, Male

Pin #	Description	Specifications
2	Current Monitor	Analog voltage relative to I _{DD} @ 25mV/100mA
3	Temp. Sense	Analog voltage relative to Module's Temperature @ 10mV/°C + 500mV
5	Shutdown	Amplifier Disable: TTL Logic High (5V) (Internally Pulled-Low)
1,6,7	VDD	+30.0V _{DC} ±1V
4,8,9	GND	Ground

Outline Drawing

