

# M3060BP35 3000– 6000 MHz / 35 Watts

The M3060BP35 is suitable for broadband mobile Jamming and band specific high power linear applications in the L and S frequency bands. This compact module utilizes high power advanced GaN devices that provide excellent power density, high efficiency, wide dynamic range and low distortions. Exceptional performance, long term reliability and high efficiency are achieved by employing advanced broadband RF matching networks and combining techniques, EMI/RFI filters, machined housings and qualified components. Sungsan's ISO9001 Quality Assurance Program assures consistent performance and the highest reliability.

- Solid-state Class AB design
- Instantaneous ultra broadband
- Suitable for CW, AM, and FM
- 50 ohm input/output impedance
- High reliability and ruggedness



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

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	3000		6000	MHz
Power Output CW	P <sub>SAT</sub>	35			Watt
Output Power @ 1dB G.C.P	P <sub>1dB</sub>	10			Watt
Power Gain	G <sub>P</sub>	11			dB
Input Power for Rated P1dB	P <sub>IN</sub>		25	30	dBm
Gain Flatness @ P1dB output power	ΔG <sub>P</sub>			±1.5	dB
Input / Output Return Loss	S11/S22			-9	dB
Noise Figure	NF			10	dB
Third Order Intercept Point(Delta = 250KHz)	IP3	+45	+47		dBm
Harmonics @ rated P1dB output power	H		-20		dBc
Spurious Signals	Spur		-70	-60	dBc
Operating Voltage	VDC	26	28	30	Volt
Current Consumption @ rated Pout	IDD		8	10	Amp
Quiescent Current	IDQ		4		Amp
Standby Current Consumption @ Shutdown	I <sub>SD</sub>		100		mA
Switching Time, 1KHz TTL, P <sub>OUT</sub> = 40W	T <sub>ON</sub> /T <sub>OFF</sub>		2.0	5.0	uSec
Module to Module Gain Matching	Opt			±0.5	dB
Module to Module Phase Matching	Opt			±10	Deg

## ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit	Limits
Operating Case Temperature	T <sub>c</sub>	-20		+80	°C	
Storage Temperature	T <sub>stg</sub>	-40		+85	°C	
Relative humidity (non-condensing)	RH	~ 95			%	
Altitude	ALT	10,000	30,000		Feet	
Shock & Vibration	SH / VI		Airborne			

## LIMITS

Parameter	Value	Limits
Input RF drive level without damage	+41dBm	Max
Load VSWR @ Pout = 20W	∞ @ all load phase & amplitude	Nom
Thermal Overload	Graceful degradation	Min

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## MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	5.71 x 3.55 x 0.91	Inch	Max
Weight	0.7	lb	Max
RF Connectors In/Out	Input : SMA (Female) / Output : SMA (Female)		
DC / Shutdown	D-Sub, 7Pin		
Cooling	External Heatsink		

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

Pin #	Description	Specifications
1	N.C	
2	Current Monitor	Analog voltage relative to I <sub>DD</sub> @ 50mV/100mA
3	Temp Monitor	Analog voltage relative to Module's Temperature @ 10mV/°C + 500mV
4	N.C	
5	Shutdown	Enable: TTL "Low" (Logic 0) or Open Disable: TTL "High" (Logic 1)
6,7	VDD	+28V <sub>DC</sub> ±1VDC
8,9	GND	Ground

## Outline Drawing

