

MU210BP25 20– 1000 MHz / 25 Watts

The MU210BP100 is suitable for multi-octave bandwidth high power CW, modulated, and pulse applications. This amplifier utilizes high power GaN devices that provide wide frequency response and dynamic range, high gain, high efficiency, and good linearity. Exceptional performance, long-term reliability, and high efficiency are achieved by employing advanced broadband RF matching networks and combining techniques, built in high quality power supply, EMI/RFI filters, machined housing, and qualified components. Sungsan's ISO9001 Quality Assurance Program assures consistent performance and the highest reliability.

- Solid-state Class AB design
- Instantaneous ultra broadband
- Standard Digital Control front panel manual gain adjust
- Suitable for CW, AM, and FM
- 50 ohm input/output impedance
- High reliability and ruggedness

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

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	20		1000	MHz
Power Output CW	P _{SAT}	25			Watt
Output Power @ 1dB G.C.P	P _{1dB}	10			Watt
Power Gain @ 1dB G.C.P	G _{1dB}	46		50	dB
Input Power for Rated Pout	P _{IN}		0		dBm
Small Signal Gain Flatness	ΔG		±1.5	±2.0	dB
Input Return Loss	S ₁₁			10	dB
Noise Figure @ minimum attenuation	NF			10	dB
Third Order Intercept Point 2-Tones @ 2W/Tone	IP3		+48		dBm
Harmonics @ P1dB G.C.P.	H		-20		dBc
Spurious Signals	Spur			-60	dBc
Operating Voltage	V _{DC}	26	28	30	Volt
Supply Current @ 25W	I _{DD}			6.0	Amp
Quiescent Current Consumption	I _{DQ}		4.0		Amp
Standby Current Consumption (TTL High)	I _{SD}		300		mA
Switching Speed	T _{ON/OFF}			20	uSec

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit	Limits
Operating Case Temperature Derated linearly between 50-80°C up to 2dB max	T _c	-20		+80	°C	
Storage Temperature	T _{stg}	-40		+85	°C	
Relative humidity w/o condensation	RH	95			%	
Altitude	ALT	10,000	30,000		Feet	
Shock & Vibration	SH / VI		Airborne			

LIMITS

Parameter	Value	Limits
Input Overdrive	+15dBm	Max
Load VSWR @ Pout = 25W	∞ @ all load phase & amplitude	Nom

MU210BP25 20– 1000 MHz / 25 Watts

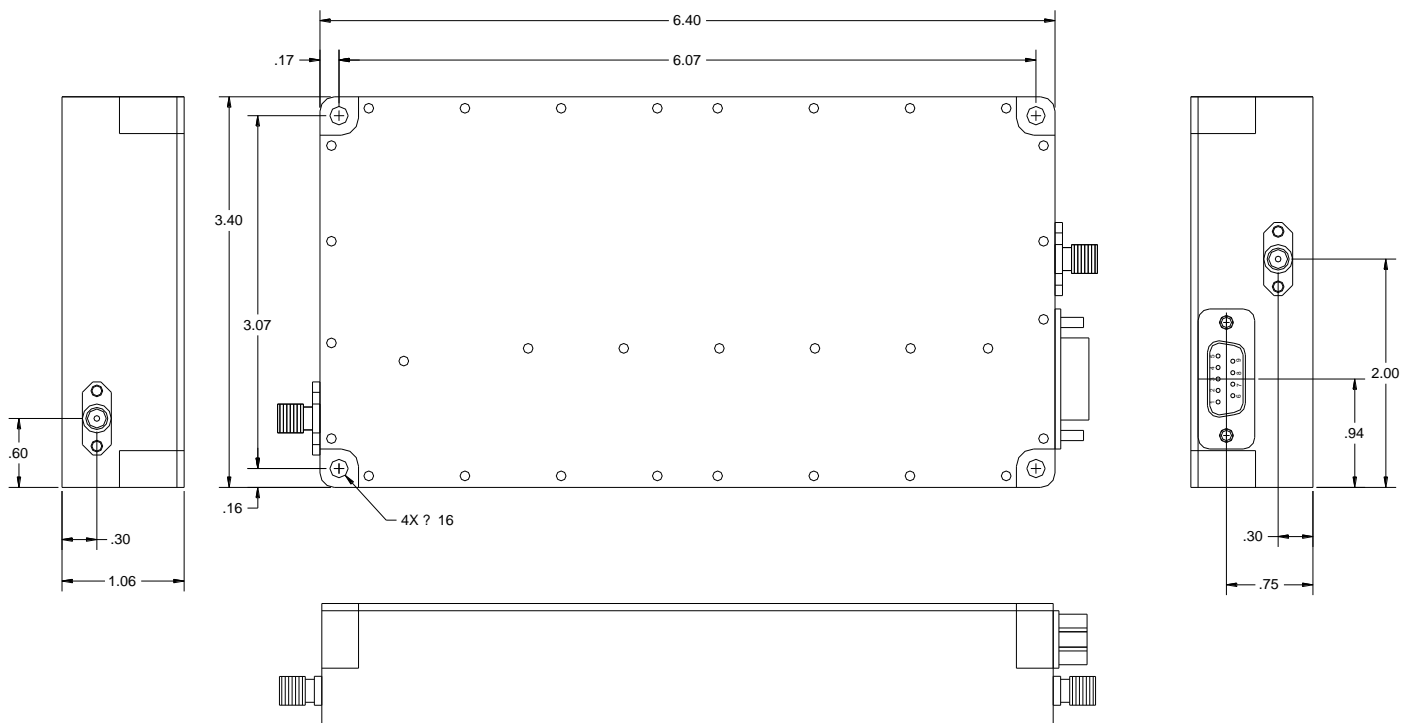
MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions (excluding heatsink)	6.4 x 3.4 x 1.1	Inch	Max
Weight without HS	1.0	lb.	Max
RF Connectors In/Out	SMA female		
DC Connectors	D-Sub, 9-Pins		
Cooling	External Heatsink		

DC CONNECTOR- D-Sub, 9Pin, Male

Pin #	Description	Specifications
1	N/C	
2	Current Consumption Monitor	Analog voltage relative to ID @ 50mV/100mA
3	Temperature Monitor	Analog voltage relative to Module's Temperature @ 10mV/°C
4	VVA	N/A
5	Mute	Enable: TTL "Low" (Logic 0) Disable: TTL "High" (Logic 1)
6, 7	VDD	+28 ± 2VDC
8, 9	GND	Ground

Outline Drawing



Features:

- Fast switching - Mute function
- Reverse polarity protection
- Temperature protection - Disabled
- Temperature indication
- Current limit protection
- Current consumption indicator