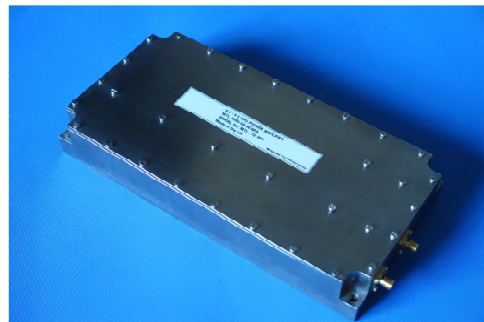


MICROWAVE TECHNOLOGY

100 Watt X-BAND GaN POWER AMPLIFIER



The MTL-8496-45-100PAG is a GaN based solid state power amplifier designed for pulsed applications and operates over the frequency range 8.4 to 9.6 GHz. The amplifier is offered in a low profile mechanical housing and is designed and manufactured for high reliability and consistent unit to unit performance.

Electrical specification at 25°C case temperature

SPECIFICATION	MIN	TYP	MAX	UNITS
Frequency Range	8.4		9.6	GHz
Small Signal Gain		45		dB
Gain Flatness		±1.5		dB
Peak output power	49.5	50		dBm
Pulse width		100		µs
Duty cycle		10		%
Pulse rise/fall time		50		ns
Input VSWR		2:1		
Output VSWR		2:1		
Harmonics		-30		dBc
Non harmonic spurious		-60		dBc
Worst case load VSWR @ all load phase			3:1	
Power supply	40			V
Power supply variation			+0.5	V
Operating case temperature	-10		+60	°C

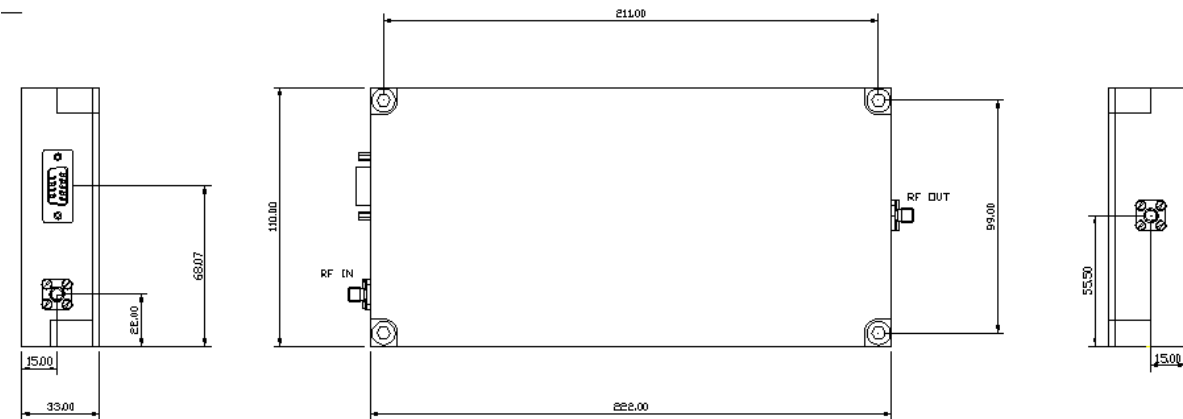
(Specification subject to changes without notice)

Monitoring Signals

Parameter	Value	Units
Current monitor	50	mV/A
Base plate temperature monitor	10	mV/°C
Fault alarm (TTL logic)	Fault=+5V No Fault=0V	V
Amplifier shut down	Enable : TTL "Low" (Low : 0 - 0.5V) Disable : TTL "High" (High : 2.5 - 5V)	

Mechanical Specifications

Parameter	Value/Type	Units	Limits
Dimensions – Excluding heat-sink & connectors	222(L) x 110(W) x 33(H)	mm	
Weight	2.0	Kg	Max
RF Input connector	SMA		
RF Output connector	N-Type Female		
DC power input and monitoring connector	Combo D-Type		
Cooling	External Heat Sink Required		



OUTLINE DRAWING