

MP2B 400MHz to 3GHz is a wideband, High efficiency GaN Power amplifier suitable for use in a manpack/portable ECM application.

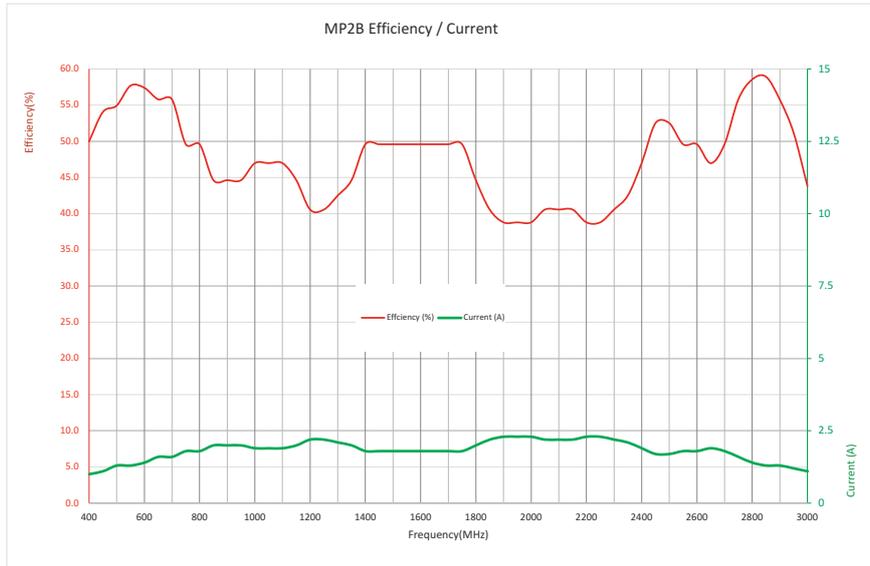
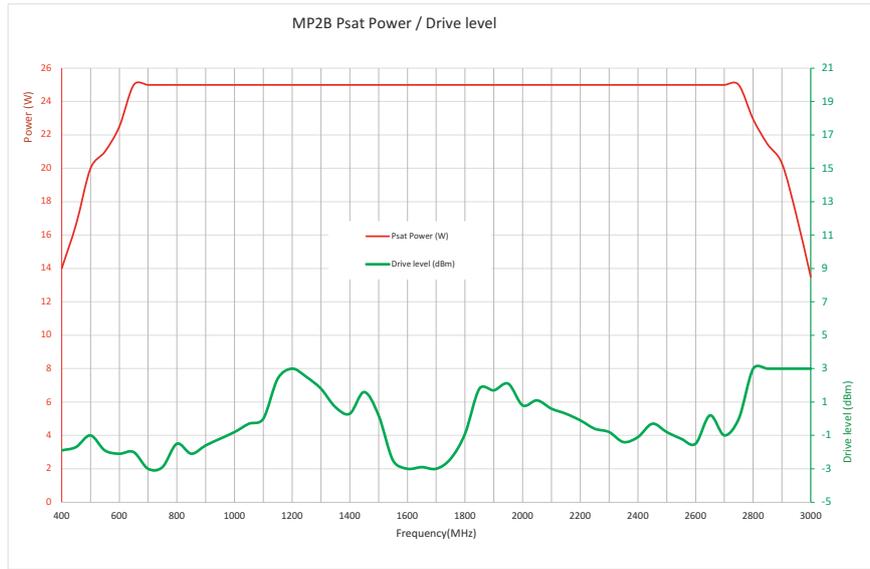


PRODUCT FEATURES

- Broadband Power
- Max power 25W
- 200ns Sargas 2 switching
- 50% Efficiency
- Compact, lightweight, Robust

ELECTRICAL CHARACTERISTICS TC = +25 °C, 28 VDC, 50 Ω System (unless otherwise noted)

PARAMETER	MINIMUM	MAXIMUM	TYPICAL	COMMENTS
Frequency	400 MHz	2.9GHz		
Psat Power	15W	28W	25W	70W Maximum DC power consumption @ 28V
Extended Frequency Psat	10W	15W		400MHz to 500MHz and 2.9GHz to 3GHz
Large Signal Gain			44dB	
Input Drive	-5dB	+5dB		For Psat or 28W Max
Input return loss			-10dB	
2nd Harmonics	-30dBc	-9dBc	-15dBc	
Current at Psat or 25W		2.5A	2A	
Efficiency at Psat or 25W			50%	@ 28V
Noise Figure	7dB	15dB		
Input Voltage	22V	30V	28V	Predictable power variation with voltage
Sargas2 Mute Rise time		300ns	150ns	<5% to >95% of settled power
Sargas2 Mute Fall time		4us	900ns	>95% to <5% of settled power
Sargas2 Mute isolation		-2dBc	-35dBc	Pin 5
Shutdown Current		120us	100us	Pin 4 (Shutdown current 150mA)
Intermodulation	-	-15dBc	-25dBc	Two 5W tones, 1MHz Spacing
Dimensions LxWxH				100mm x 55mm x 30mm
Weight			200g	
Connectors				SMA & 9 Pin D-type
Operating Temperature	-20°C	+80°C		Temperature measured at PA Case
Storage temperature	-40°C	+85°C		
Thermal Protection				Cut out operates at 85°C ± 5°C
Open/short Survivability				10:1 VSWR at all phase angles (for 1 minute)



MP3C 9 Pin D-Type Connector

PIN	DESCRIPTION	SPECIFICATION
4	Standard Shutdown	Enable "low" (GND <1V) Disable "High" (2.5 to 3.3V) or Disconnected (floating) Absolute max voltage 5.5V. Absolute maximum switching frequency 50kHz
5	Enhanced Mute (Sargas 2)	Disable "low" (GND <1V) Enable "High" (2.5 to 3.3V) or Disconnected (floating) Absolute max voltage 5.5V. Absolute maximum switching frequency 50kHz
6,7	VDD	+28V DC Absolute maximum voltage 32V
8,9	GND	Ground

This product is designed and manufactured in the United Kingdom in accordance with the ISO 9001:2015 Quality Management System. RoHS compliant parts and processes are used in the manufacture of this product.