

MP1BC2 20MHz to 520MHz is a wideband, High efficiency GaN Power amplifier suitable for use in a manpack/portable ECM application.

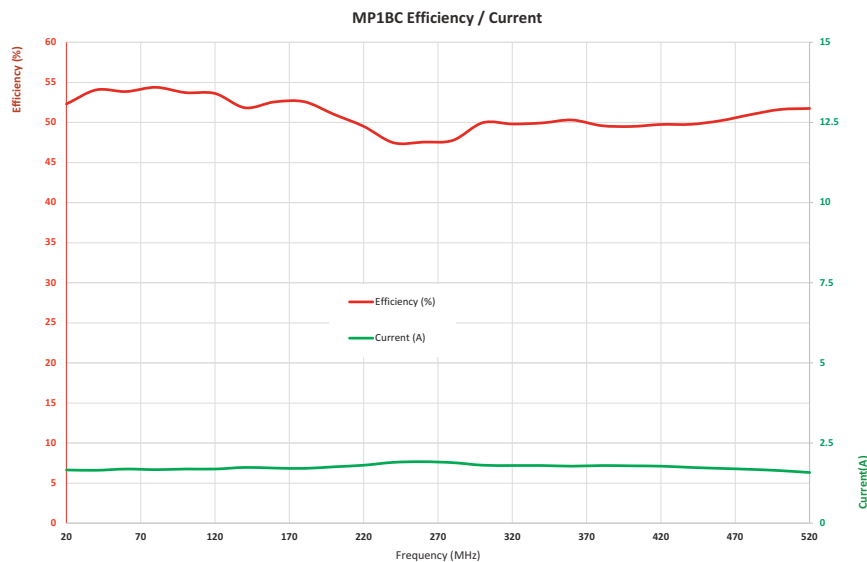
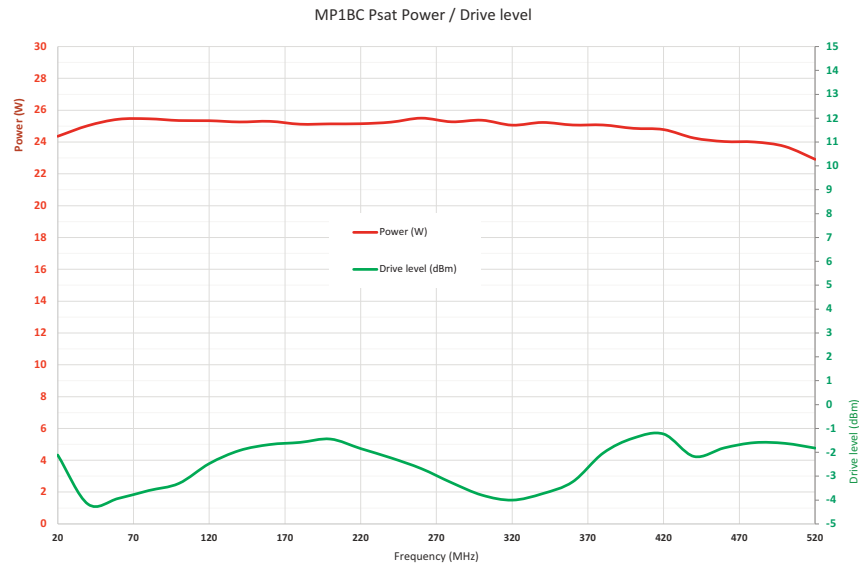


PRODUCT FEATURES

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

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

PARAMETER	MINIMUM	MAXIMUM	TYPICAL	COMMENTS
Frequency	20 MHz	520 MHz		
Psat Power @ 28V	20W	27W	25W	@ 32V max power 30W
Large Signal Gain			44dB	@ 28V
Input Drive	-3dB	+3dB		For Psat (Absolute max +14dBm)
Input Return Loss			-10dB	
2nd Harmonics		-10dBc	-15dBc	
Current at Psat		2.5A	1.8A	@ 28V
Efficiency at Psat		55%	50%	@ 28V
Noise figure	6dB	10dB		
Input voltage	22V	30V	28V	Predictable power variation with voltage
Sargas2 Mute rise time		950ns	400ns	<5% to >95% of settled power
Sargas2 Mute fall time		300ns	200ns	>95% to <5% of settled power
Sargas2 Mute isolation		-22dBc	-30dBc	Pin5
Intermodulation @28V		-15dBc	-25dBc	Two 5W tones, 1MHz Spacing
Dimensions WxLxH				120mm x 55mm x 30mm
Weight			260g	Integrated without housing @ approx 50g
Connectors		Straight SMA & 9 Pin D-type		Options: Right angle SMA or QMA
Operating Temperature	-20°C	+80°C		Cold start -40°C
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
Temperature monitor	8mV/°C	(1365mv = 25°C)		Pin 2



MP1BC 9 Pin D-Type Connector

PIN	DESCRIPTION	SPECIFICATION
2	Temperature monitor	-40C (1885mV) to 85C (865mV)
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.