VM2100J

100W POWER AMPLIFIER
2080MHz-2190MHz

ANTARES
DEFENCE SYSTEMS

VM2100J is part of a new series of GaN based PA's developed specifically to cover GSM requirements. Key attributes include high operating temperature range compared to traditional VDMOS/LDMOS units and exceptional efficiency and power output for its size.

PRODUCT FEATURES

- 100W Min
- Efficiency 45% Typical
- <1µs Sargas Switching
- Compact, Lightweight, Robust

PARAMETER	MINIMUM	MAXIMUM	TYPICAL	COMMENTS
Frequency	2080 MHz	2190MHz		
Psat Power @ 28V	100W		110W	2110MHz to 2170MHz
Gain @ Psat	46dB	50dB	48dB	Max input +5dBm
Gain variation @ Psat			±1.0dB	
Small signal gain			53dB	
Input return loss			-7dB	
Harmonic		-20dBc	-25dBc	2nd Harmonic @ Psat
Psat Current @ 28V		10A	9.0A	Maximum DC Power consumption 280W
Psat Efficiency @ 28V	40%	50%	45%	
Standard Rise Time			5µs	Standard shutdown (Pin 4 D-type)
Enhanced Rise Time			900ns	Sargas switching (Pin 5 D-type)
Intermodulation		-25dBc	-30dBc	Two 20W tones, 1MHz Spacing
Intermodulation		-20dBc	-25dBc	Two 20W tones, 10MHz Spacing
Dimensions LxWxH				100mm x 91.5mm x 30mm
Weight			350g	
Connectors				SMA & 9 Pin D-type
Operating Temperature	-20°C	+80°C		Temperature measured at PA Case
Thermal Protection				Cut out operates at 85°C
Open/short Survivability				10:1 VSWR at all phase angles

Other products in GSM series:

VM900J 100W min.

VM1800J 100W min.

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.

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