

VM900J 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 55% Typical
- <1µs Sargas Switching
- Compact, Lightweight, Robust
- 2nd Harmonics -50dBc Typical

PARAMETER	MINIMUM	MAXIMUM	TYPICAL	COMMENTS
Frequency	880 MHz	1GHz		
Psat Power @ 28V	100W		110W	920MHz to 960MHz
Gain @ Psat	49dB	51dB	50dB	Max input +5dBm
Gain variation @ Psat			±1.0dB	
Small signal gain			55dB	
Input return loss			-15dB	
Harmonic		-40dBc	-50dBc	2nd Harmonic @ Psat
Psat Current @ 28V		8.5A	8 A	Maximum DC Power consumption 240W
Psat Efficiency @ 28V	50%	60%	55%	
Standard Rise Time			5µs	Standard shutdown (Pin 4 D-type)
Enhanced Rise Time			900ns	Sargas switching (Pin 5 D-type)
Intermodulation		-25dBc	-28dBc	Two 20W tones, 1MHz Spacing
Intermodulation		-20dBc	-23dBc	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:

VM1800J 100W min.

VM2100J 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.