

VM1K 20MHz to 600MHz is a wideband, high efficiency GaN Power Amplifier suitable for use in a variety of ECM applications.



PRODUCT FEATURES

- Broadband 20MHz to 600MHz
- Max Power 170W
- 300ns Sargas2 Switching
- -50dBc Mute Isolation
- 65% Peak Efficiency

PARAMETER	MINIMUM	MAXIMUM	TYPICAL	COMMENTS
Frequency	20 MHz	600 MHz		
Psat Power	100W	170W	150W	
Large Signal Gain			52dB	
Input Drive	-2dB	+2dB		For Psat or 170W Max
Input Return Loss			-10dB	
2nd Harmonics	-40dBc	-15dBc	-20dBc	
Current at Psat or 170W	8A	10A	9A	
Efficiency at Psat or 170W	45%	65%	55%	@28V
Input voltage	22V	30V		Predictable power variation with voltage
Sargas2 Mute rise time			400ns	0% to 100% from clock edge
Sargas2 Mute fall time			200ns	100% to 0% from clock edge
Sargas2 Mute isolation	-50dB	-60dB	-55dB	Pin 5
Shutdown Current		250mA	220mA	Pin 4
Intermodulation		-15dBc	-20dBc	Two 20W Tones, 1MHz Spacing
Dimensions LxWxH				187mm x 91.5mm x 30mm
Weight			700g	
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



VM1K 9 Pin D-Type Connector

PIN	DESCRIPTION	SPECIFICATION
4	Standard Shutdown	Enable "low" (GND) Disable "High" (2.5 to 3.3V) or Disconnected (floating)
5	Enhanced Mute (Sargas 2)	Disable "low" (GND) Enable "High" (2.5 to 3.3V) or Disconnected (floating)
6,7	VDD	+28V DC
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.