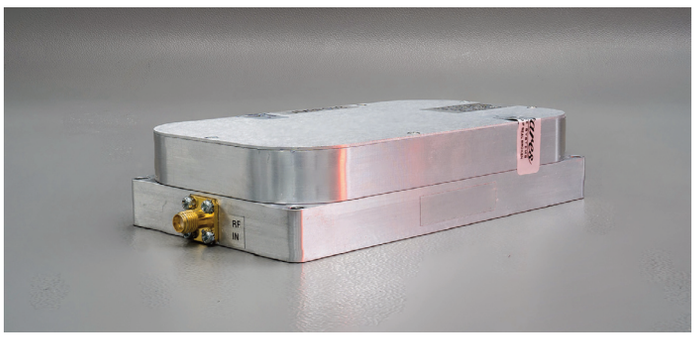
VM34E

HIGH POWER GaN POWER AMPLIFIER
1.8GHz-8GHz 50W PA

ANTARES
DEFENCE SYSTEMS

VM34E 1.8GHz to 8GHz 50W PA, is a very wideband, high power GaN Power Amplifier. VM34E is suitable for a variety of applications such as, electronic warfare, countermeasures, broadband jamming, airborne aircraft, UAV equipment and general amplifier stage wireless infrastructure.



PRODUCT FEATURES

- Broadband 1.8GHz to 8GHz
- Max power 50W at 28V
- Compact and robust

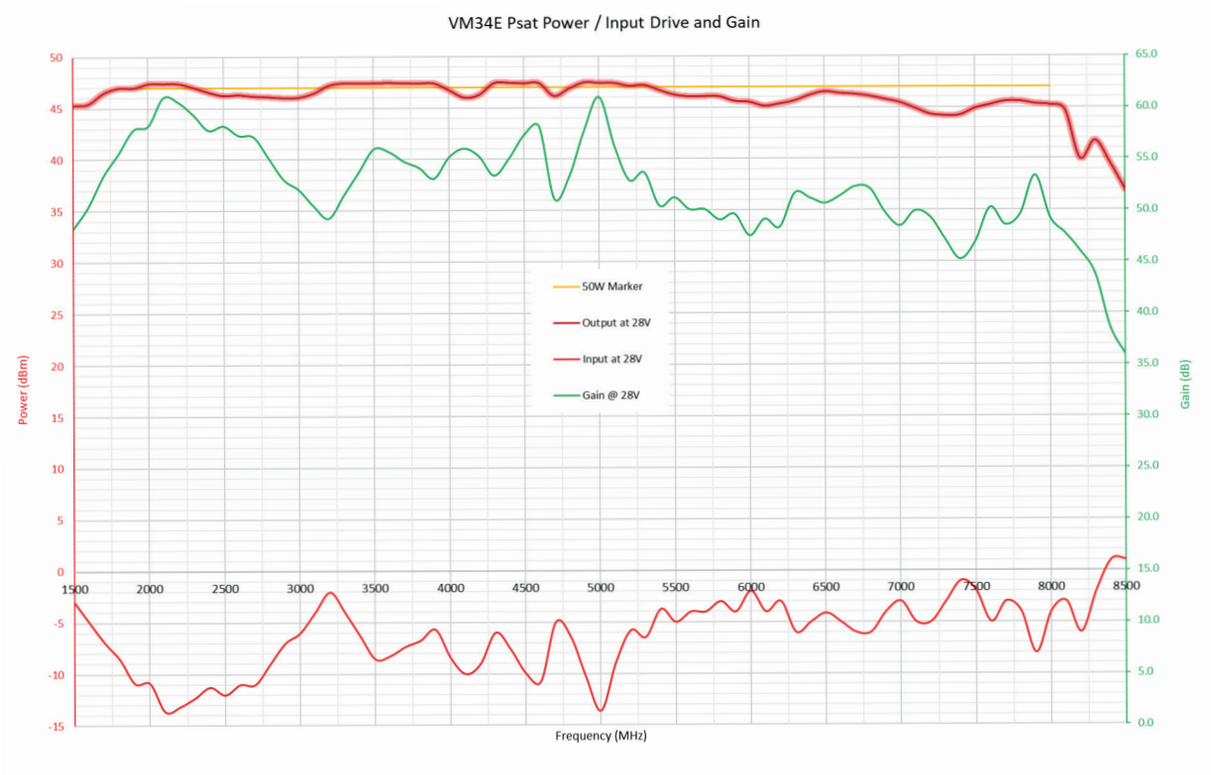
ELECTRICAL CHARACTERISTICS TC = +25 °C, 28 VDC, 50 Ω System (unless otherwise noted)

PARAMETER	MINIMUM	MAXIMUM	TYPICAL	COMMENTS
Frequency	1.8GHz	8GHz		
Psat Power 1.8GHz to 7GHz	35W	55W	40W	
Psat Power 7GHz to 8GHz	25W	40W	30W	
Large Signal Gain	48dB		50dB	
Small Signal Gain			-55dB	
Input Drive level for Psat		0dBm	-5dBm	Absolute maximum +8dBm
Input Return Loss			-10dB	
2nd Harmonics		-10dBc	-20dBc	Harmonics at Psat
Current at Psat or 55W		12A	7A	Supply Voltage 28V
Efficiency at Psat or 55W		35%	20%	Supply Voltage 28V
Input Voltage	22V	30V	28V	Predictable power variation with voltage
Shutdown Rise time			15us	Pin 4
Shutdown Current			50mA	Pin 4
Intermodulation		-20dBc	-25dBc	Two 10W Tones, 1MHz Spacing
Dimensions LxWxH				137mm x 76mm x 30mm
Weight			425g	
Connectors				SMA & 9 Pin D-type
Operating Base 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

Antares Defence Systems Ltd
Unit 5, Alton Road Industrial Estate, Alton Road
Ross-on-Wye, Herefordshire, HR9 5NB

+44 (0)1989 760 590
sales@antaresdefencesystems.com
www.antaresdefencesystems.com

Part Number: VM34E
Part Version: v1



VM34E 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.
6,7	VDD	+28V DC. Absolute max 32V
8,9	GND	Ground

RoHS COMPLIANCE

RoHS compliant parts and processes are used in the manufacture of this product.

QUALITY

This product is designed and manufactured in the United Kingdom in accordance with the ISO 9001:2015 Quality Management System.