

80W 50Ω 20 to 1000 MHz


Description

The KSA80W201000 High Power Amplifier that operates from 20MHz to 1 GHz at a saturated output power of 80W. This high power LDMOS (laterally-diffused metal-oxide semiconductor) class AB amplifier is designed for a 50 ohm input/output impedance and offers high efficiency, operating over a wide dynamic range with an impressive gain of 49dB.

Applications

High power output across broad frequency range supports a wide array of applications, from EMC/EMI, broadcasting, medical, and high-power lab testing to marine band, public safety, and aircraft communications.

Electrical Specifications (at 25°C):

| Parameters | Min | Typical | Max | Units |
|------------------------------------|-----|---------|------|-------|
| Frequency Range | 20 | | 1000 | MHz |
| Gain | | 49 | | dB |
| Gain Flatness | | -/+2 | | dB |
| Psat | 47 | 49 | | dBm |
| Efficiency | | 30 | | % |
| Harmonics @ 50W | | -10 | | dBc |
| Spurious @ 50W | | -55 | | dBc |
| Impedance (Input) | | 50 | - | Ohms |
| Impedance (Output) | | 50 | | Ohms |
| Input VSWR | | | 3:1 | |
| AC Voltage @60Hz | | 120 | | V |
| AC Current @60Hz | | 2.57 | | A |
| Operating Temperature Range | -20 | | +60 | °C |

Allow for 20% Increased in current during initial power-up stage

Environmental Parameters:

Operating Temperature -20°C to 60°C
 Storage Range -25 to 65°C
 Input RF Power (no damage) 10 dBm

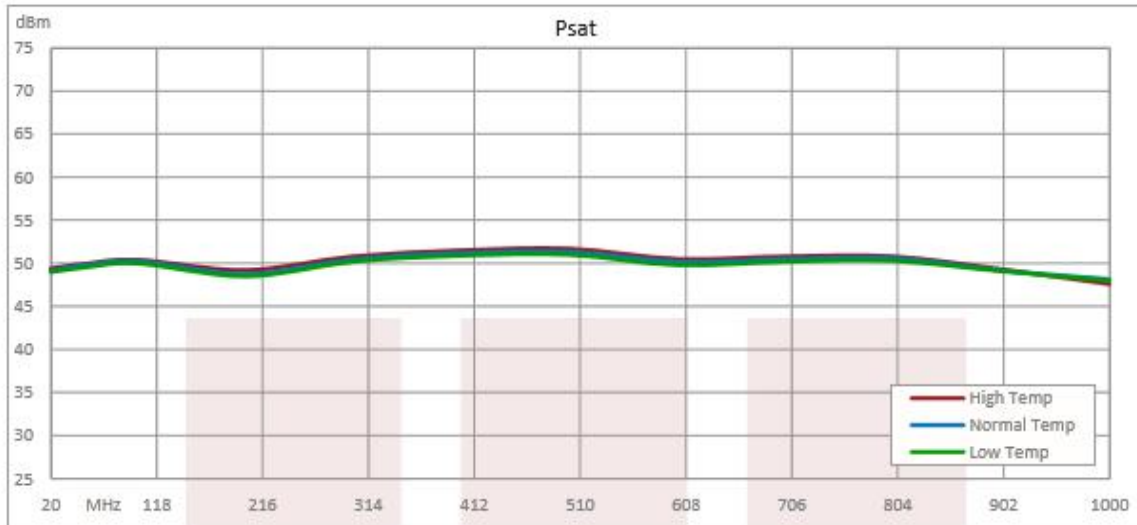
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|------------------|------------------------|
| Thermal Overload | 85°C +/-5°C |
| Humidity | 95% Non-Condensing |
| Shock | Normal Truck Transport |
| Vibration | Normal Truck Transport |

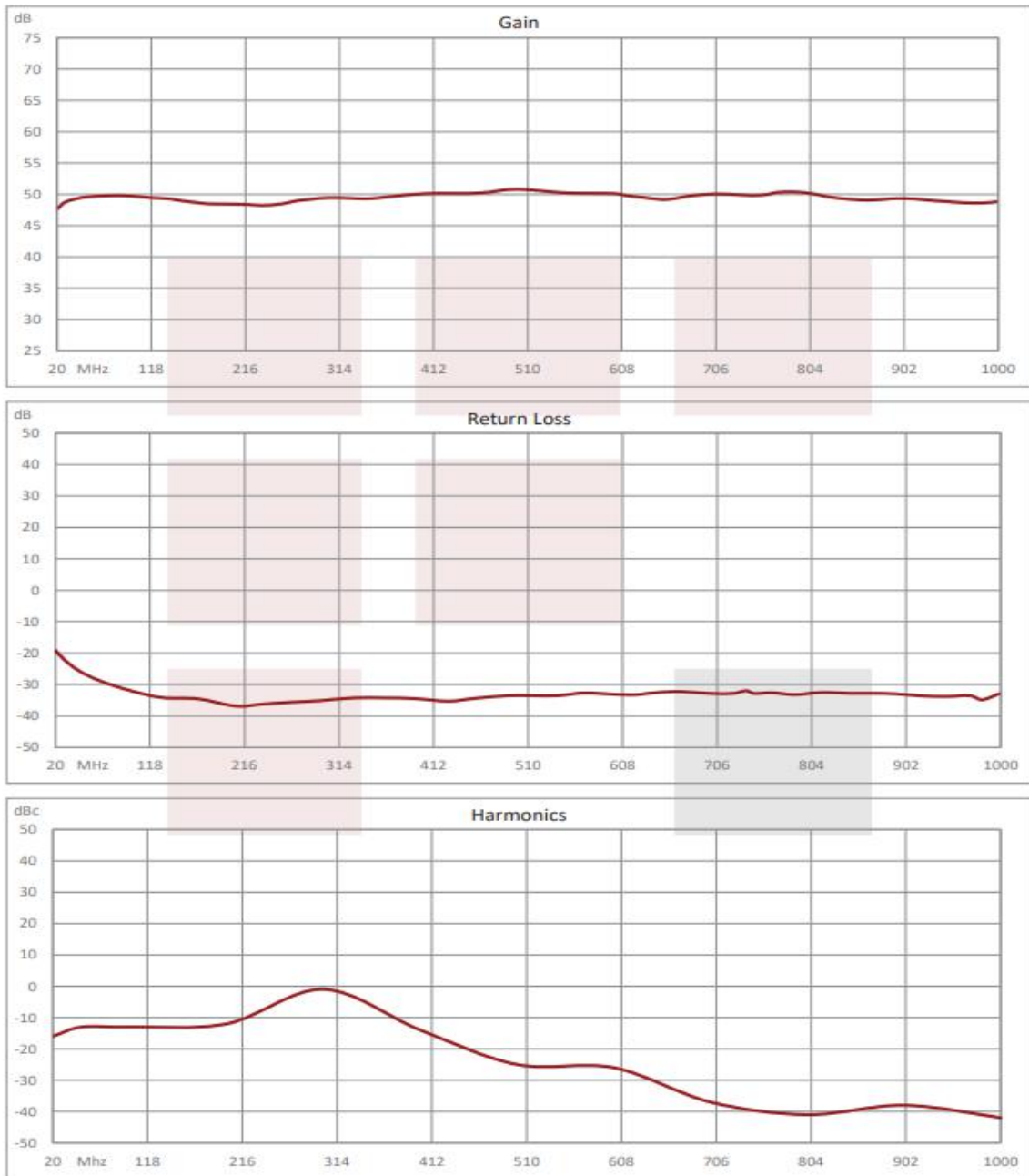
Mechanical:

| | |
|---|---------------------|
| Overall Length (not including RF connectors): | 300mm (11.8 in) |
| Overall Width: | 200mm (7.87 in) |
| Overall Height: | 96mm (3.78 in) |
| Weight: | 2.35kg or 5.18 lbs. |

| | |
|---------------------------|-----------------|
| Enclosure body: | Aluminum (Gray) |
| Input Connector | N-type |
| Output Connector | N-type |
| LED Power Indicator (Red) | |

Typical Performance Data





Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

All components in this product are fully compliant with:

