

Applications

Bench Top Power Amplifier

- Labwork
- Test and Measurement
- Load Pull
- EMI Test
- Anaechoic Chambers and Test Ranges

Product Features

- Saturated Power - 20 Watts typical
- Operating Band - 2 GHz to 20 GHz
- Solid State MMIC Reliability
- Multi Element Redundancy
- Instant On (No Warm Up)
- Flat Gain Response
- Excellent Harmonic and Intermodulation Characteristics

Optional Accessories

- Rack Mount Brackets RM01.0
- Alternate AC Cord Configurations



General Description

TriQuint's RM022020 Amplifier utilizes our patented Spatium™ combining technology providing unprecedented performance in a general purpose laboratory bench top amplifier.

Suitable for use as a driver/booster amplifier, enabling more power incident upon the device under test (DUT) this amplifier is an excellent alternative to Traveling Wave Tube Amplifiers (TWTAs). The RM022020 amplifier operates instantaneously across the 2 GHz - 20 GHz spectrum achieving saturated output powers (P_{sat}) greater than 20 Watts. Front panel manual gain adjustment enables simple, rapid performance optimization.

Built-In-Test (BIT) monitors continuously evaluate the amplifier performance and provide instant visual indication of anomalous behavior.

Custom configurations and optimized screening conditions are available on request, consult factory.

Standard Configuration

- SMA (F)Coaxial Input/Output
- IEC 60320 C14 Compliant AC input
- 2 Meter AC Power Cord with NEMA 5-15P
- Front Panel Gain Adjust
- Air Flow – Side intake – Rear exhaust

Ordering Information

Part	ECCN	Description
RM022020	3A001.b.4.b	2 – 20 GHz 20W Benchtop Amp

Absolute Maximum Ratings

Parameter	Value
RF Input	+20dBm
Load VSWR	3:1
Operating Temperature	-20 to +60 °C
Storage Temperature	-20 to +75 °C

Operation of this device outside the parameter ranges given above may cause permanent damage. These are stress ratings only, and functional operation of the device at these conditions is not implied.

Recommended Operating Conditions

Parameter	Value
AC Input (Rear)	85-264 Vac 47-63Hz 300VA
Operating Temperature	0 to +50 °C

Electrical specifications are measured at specified test conditions. Specifications are not guaranteed over all operating conditions.

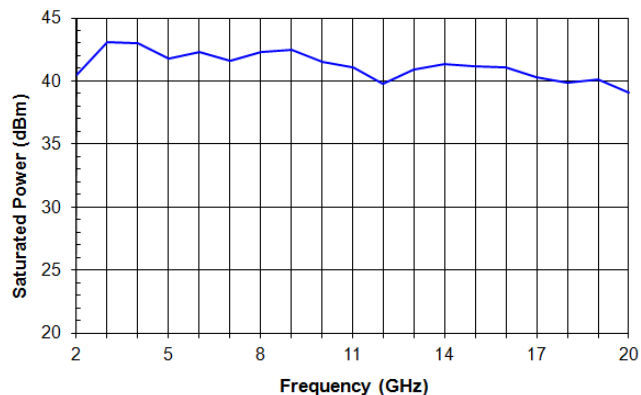
Specifications

As measured into a load VSWR $\leq 1.25:1$

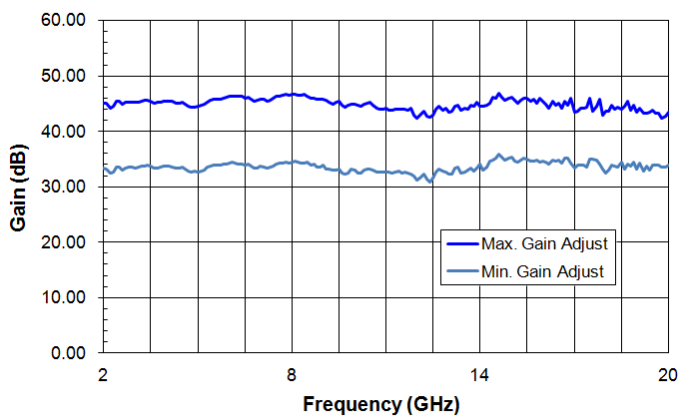
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Typical Performance

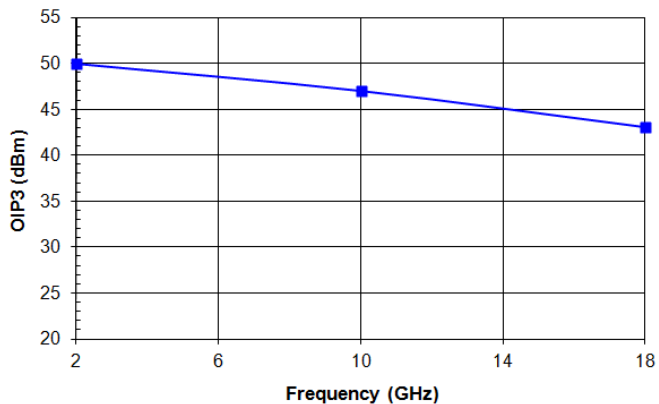
Saturated Power



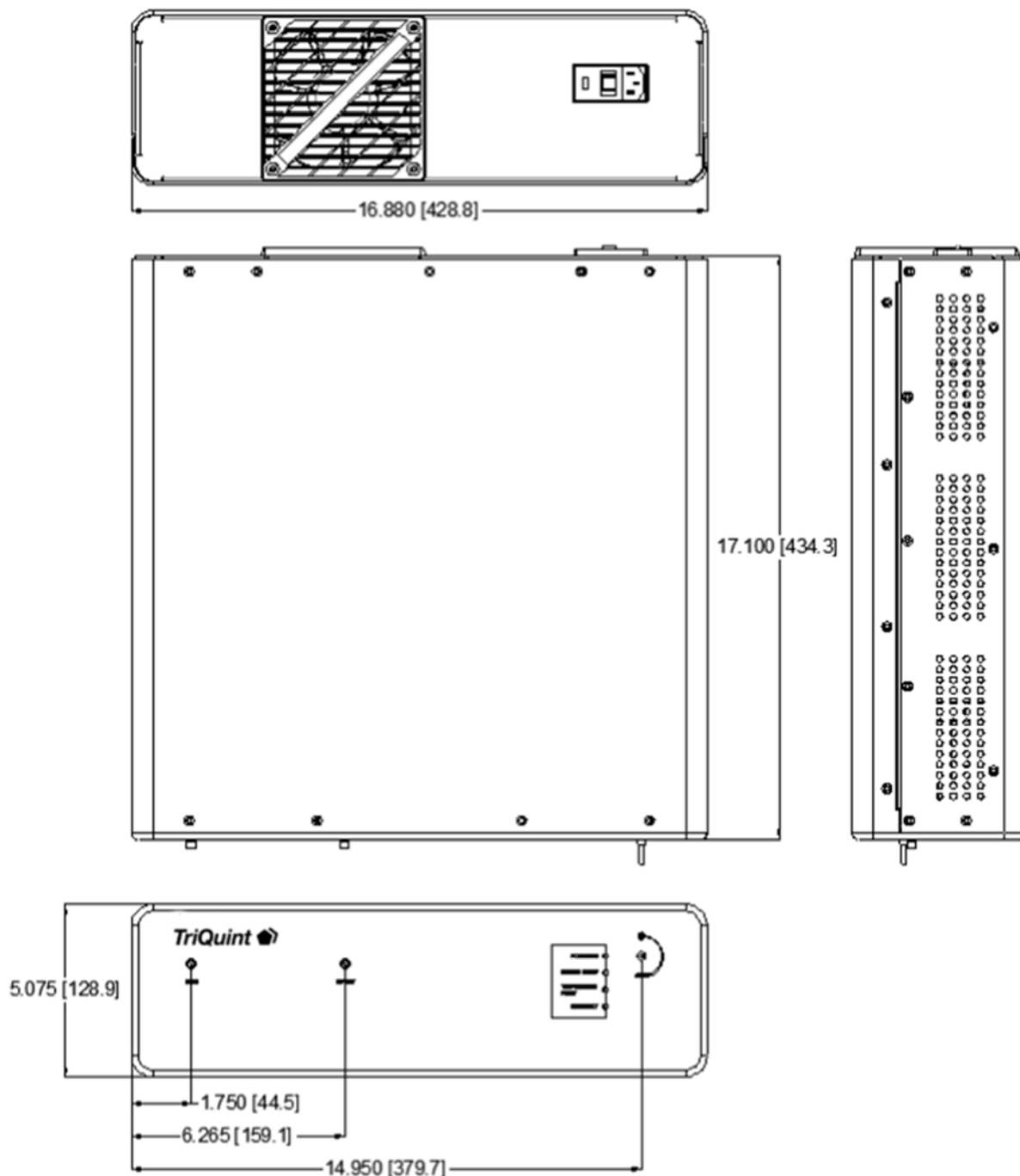
Gain at Minimum and Maximum Adjust



Output Third Order Intercept



Outline Drawings



Product Compliance Information

ESD Sensitivity Ratings



Caution! ESD-Sensitive Device

ESD Rating: TBD
Value: TBD
Test: Human Body Model (HBM)
Standard: JEDEC Standard JESD22-A114

ECCN

US Department of Commerce: **3A001.b.4.b**

Contact Information

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