

# L-Band 2.0 kW TWT Compact Pulsed Amplifier

## VZL3529J1

# Features:

- Rack mount
- Coaxial output
- GPIB remot
- Compact high pulsed power
- · Single phase AC power
- Local or remote control
- · Wide RF bandwidth up to 2.5 GHz
- Up to 4% duty cyclee

# **Benefits:**

- Versatile
- Suitable for lab environments
- Designed for the global market
- Modular design and built-in fault diagnostics for easy maintenance
- Wide RF bandwidth reduces number of required amplifiers

## Compact

Five rack-units tall (8.75 in/222 mm).

#### Versatile

Wide band, automatic fault recycle, user-friendly microprocessor-controlled logic with integrated computer interface, digital metering, and quiet operation suitable for laboratory environments.

An integral solid state preamplifier and IEEE interface are included as standard features.



#### **Applications:**

 Test and measurement systems

## **Global Applications**

230 VAC operation. Designed to meet International Safety Standard EN61010 and Electromagnetic Compatibility EMC 2004/108/EC.

#### **Easy to Maintain**

Modular design and built-in fault diagnostic capability.

#### **Worldwide Support**

Backed by more than 50 years of high power experience, CPI's worldwide 24-hour customer support network includes more than 20 regional factory service centers.

Distributed by: Reliant EMC LLC, 3311 Lewis Ave, Signal Hill CA 90755, 408-916-5750, www.reliantemc.com

- Solid State Power Amplifiers Integrated Microwave Assemblies
- Receiver Protectors Control Components Transmitters Amplifiers
  - Modulators Magnetrons Crossed Field Amplifiers
  - Ring Loop Traveling Wave Tubes Power Couplers





# L-Band 2.0 kW TWT Compact Pulsed Amplifier - VZL3529J1

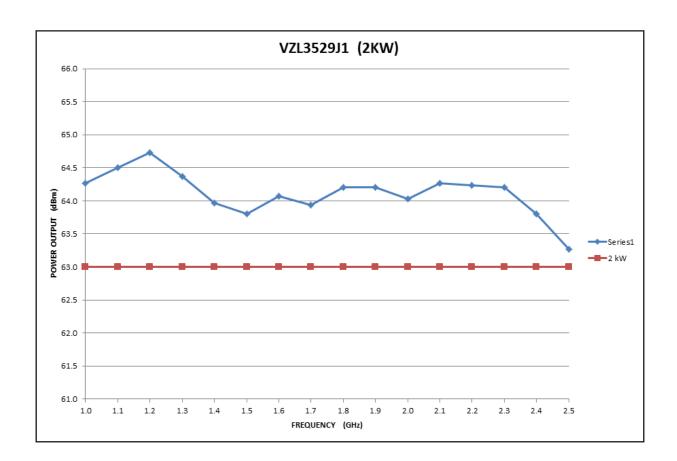
Specifications	
Frequency	1.0 to 2.5 GHz
Output Power at Flange	2000 W (see page 3 Power Plot)
Gain	63 dB min. at rated power; >65 dB min. at small signal
Gain Adjustment Range	20 dB min.
Input VSWR	2.5:1 typical
Output VSWR	2.5:1 typical
Load VSWR	1.5:1 max. for full spec. compliance; may oscillate with unshielded opening due to coupling 70 input. Should not be tested with connector off.
Pulse Width	0.1 μs to 100 μs
PRF	50 kHz max.
Duty Cycle	4% max.
Delay	400 ns typical
Droop	0.5 dB over 50 µs
NPO	-15 dBm/MHz Beam On; -110 dBm/MHz Beam Off
Primary Power	220 - 240 VAC, single phase 47- 63 Hz
Power Consumption	1.2 kVA typical
Filament Voltage	Reduction of 10% in standby for extended TWT life
Inrush Current	200% max.
Ambient Temperature	-10° to +40°C operating -40° to +70°C non-operating
Relative Humidity	95% non-condensing
Altitude	10,000 ft. with standard adiabatic derating of 2°C/1000 ft., operating; 40,000 ft., non-operating
Shock and Vibration	As normally encountered in a protected laboratory environment
Cooling (TWT)	Forced air with integral blower Rear air intake & exhaust; 0.10" water max. external pressure loss allowable
RF Input Connection	Type N female
RF Output Connection	Type N female
RF Output Monitor/sample	Type N female, -46 dB nominal
Dimensions (W x H x D)*	19 x 8.72 x 26 in. (483 x 221 x 661 mm)
Weight	150 lbs (68 kg) max.
Heat Dissipation	≈720 W
Safety	EN61010
Acoustic Noise	65 dBA @ 3 ft. from amplifier

Distributed by: Reliant EMC LLC, 3311 Lewis Ave, Signal Hill CA 90755, 408-916-5750, www.reliantemc.com

VZL3529J1 PG. 2 Rev. 4/18



# L-Band 2.0 kW TWT Compact Pulsed Amplifier - VZL3529J1



VZL3529J1 PG. 3 Rev. 4/18