

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 cycle

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



Applications:

- Test and measurement systems

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.

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

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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 μ s to 100 μ s
PRF	50 kHz max.
Duty Cycle	4% max.
Delay	400 ns typical
Droop	0.5 dB over 50 μ s
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

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