# **Compact Medium Pulsed Amplifier**

for Test and Measurement Applications

2.5 to 8.0 GHz

The VZS/C-3529J1

2000 Watt TWT Compact Medium Pulsed Amplier.



#### Compact

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

#### Versatile

Ultra wide-band, automatic fault recycle, user friendly microprocessor-controlled logic with integrated computer interface, digital metering, electronic variable attenuation, soft fail when subjected to extreme load SWR conditions, quiet operation for a laboratory environment.

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

### **Global Applications**

230 VAC operation. Meets International Safety Standard EN61010 and Electromagnetic Compatibility 89/336/EEC.

#### Easy to Maintain

Modular design and built-in fault diagnostic capability backed by CPI's worldwide 24-hour customer support network that includes 9 regional factory Service Centers.



Communications & Power Industries Canada, Inc. 45 River Drive / Georgetown, Ontario / Canada L7G 2J4 Hot Line Telephone: 1-800-267-JETSAT TEL: 905-877-0161 / FAX: 905-877-5327 E-MAIL: marketing@cmp.cpii.com WEB: www.cpii.com/cmp

#### **OPTIONS:**

- Input Isolator (-1 dB gain)
- Remote Control Panel
- 115 VAC External Step-Up Transformer

# SPECIFICATIONS, VZS/C-3529J1 Electrical

| Electrical                            |  | Environmental (            |  |
|---------------------------------------|--|----------------------------|--|
| TWT Model Number                      | MTG3041L2  | Ambient Temperature        |  |
| Frequency                             | 2.5 to 8.0 GHz   | Relative Humidity          |  |
| Output Power<br>TWT                   | 2200W (min.)   | Altitude                   |  |
| Flange                                | 2000W (min.)   | Shock and Vibration        |  |
| Gain                                  | 63 dB min. at rated power output;<br>65 dB min. at small signal  |                            |  |
| RF Level Adjust                       | 0 to 20 dB   | Acoustic Noise             |  |
| Gain Stability                        | ±0.25 dB/24hr max.   | Mechanical                 |  |
|                                       | (after 30 min. warmup and at constant drive and temperature)   | Cooling (TWT)              |  |
| Gain Variation                        | 18 dB pk-to-pk, typical  | RF Connectors Input Output |  |
| Input VSWR                            | 2.5:1 max.<br>2.0:1 max. (with optional input isolator)  |                            |  |
| Output VSWR                           | 2.5:1 typical  | RF Output Monitor          |  |
| Load VSWR                             | 1.5:1 max. for full spec compliance VSWR Protection Limits 500 Watts   | Dimensions (WxHxE          |  |
| Phase Noise                           | 0.50 degrees rms asynchronous ripple   | Weight                     |  |
| Pulse Width                           | 0.07 to 50 microseconds Safety   |                            |  |
| PRF<br>Droop<br>NPO<br>Duty Cycle     | 100 microseconds available (Optional)<br>50 KHz max. 100 KHz (Optional)<br>0.5 dB over 50 microseconds<br>-15 dBm/MHz (on) -110 dBm/MHz (off)<br>6.0% max. | Heat Dissipation           |  |
| Delay                                 | 300 nanoseconds (typical) 400 ns max.  |                            |  |
| Harmonic Content                      | -3 dBc typical at lower band edge<br>decreasing to -15 dBc typical at upper<br>band edge.  |                            |  |
| Primary Power<br>Voltage<br>Frequency | 220-240 VAC $\pm 10\%$ , single phase 47-63 Hz   |                            |  |
| Power Consumption                     | 2.6 kVA typical<br>3.0 kVA max.  |                            |  |
| Inrush Current                        | 200% max.  |                            |  |
|                                       |  |                            |  |

reduction of 10% in standby (Optional)

## **Environmental (Operating)**

| Ambient Temperature    | -10° to + 40°C operating  |
|------------------------|---|
| Relative Humidity      | 95% non-condensing  |
| Altitude               | 10,000 ft. with standard adiabatic derating of 2°C/1000 ft., operating    |
| Shock and Vibration    | As normally encountered in a protected engineering laboratory environment |
| Acoustic Noise         | 65 dBA @ 3 ft. from amplifier   |
| Mechanical             |   |
| Cooling (TWT)          | Forced air with integral blower<br>Rear air intake & exhaust              |
| RF Connectors          |   |
| Input<br>Output        | Type-N Female<br>Type-N Female  |
| RF Output Monitor      | Type-N Female, -50 dB nominal   |
| Dimensions (W x H x D) | 19 x 8.75 x 26 in<br>(483 x 222 x 661 mm)                                 |

120 lbs/55 kg EN61010

700 Watts (TBD)



**KEEPING YOU ON THE AIR** not up in the air

For more detailed information, please refer to the corresponding CPI Technical Description.

Filament Voltage

**Note:** Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design.

