



# Planar Monolithics Industries, Inc.

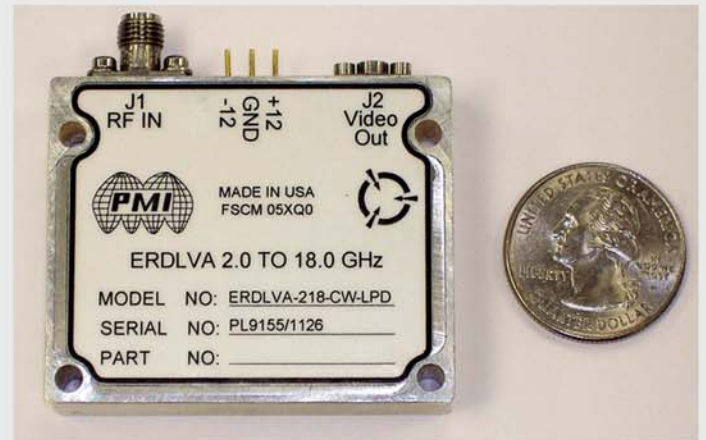
RF & Microwave Components and Modules to 40GHz

## ERDLVA, 2-18GHz with CW Immunity PMI Model No. ERDLVA-218-CW-LPD

PMI Model ERDLVA-218-CW-LPD is a **CW Immune**, Extended Range Detector Logarithmic Video Amplifier (ERDLVA) designed for **ultra low DC power consumption**. This model operates over the 2.0 to 18.0GHz frequency range and has the ability to interface with an output cable measuring over 100 feet in length. This model provides very high speed, excellent flatness and accuracy in an ultra small hermetically sealed housing measuring only 2.04" x 1.67" x 0.472"

### Specifications:

Frequency Range	2.0 to 18.0GHz
Frequency Flatness	±2.0 dB max.
TSS	-64dBm min.
Maximum Noise	100mV RMS with input terminated
VSWR:	2.0:1 max.
Maximum Input Power (No Damage)	+30dBm CW +50dBm Peak Pulse, 1% Duty Cycle, 10usec
Log Slope	77mV/dB (±5mV)
Video Output Range	-0.5V (-60dBm) < RF IN < 5.5V (4dBm)
DC Offset	±150mV
Log Range	-60 to +4dBm min.
Log Linearity	±1.5dB (-20°C to +85°C) max. ±1.75dB (-54°C to +95°C) max.
Pulse Range	200nsec to 20usec
Propagation Delay	30nsec
Rise Time	35nsec max. (20nsec typ)
Settling Time to ±1dB	50nsec
Recovery Time	500nsec max (200nsec typ)
Duty Cycle	80% at maximum pulse width 50% at minimum pulse width
CW Immunity Range	TSS to -40dBm
Pulse Considered "CW"	900usec
Baseline Shift	25mV max.
Rejection Time	1msec
Droop	1dB max.
Power Supply	±10.8V to ±12.5V
Maximum DC Power	3.9 watts (Both supplies)
Weight	8oz max (3 oz. typ)
Reliability @ +95°C	>75,000 hours
Package	Hermetically sealed
Finish	Mil-Spec Epoxy Paint, Gray Color



### Environmental Ratings:

Temperature:	-54°C to +95 °C Operating -62 °C to +125 °C Non-Operating
High Temperature Operation	MIL-STD-810G, Method 501.5, Procedure II
Low Temperature	MIL-STD-810G, Method 502.5, Procedure I (Storage) and Procedure II (Operational)
Temperature Shock:	MIL-STD-810G, Method 503.5, Procedure I-C
Temperature Cycle	MIL-STD-810G, Figure 503.5-3
Humidity:	MIL-STD-810G, Method 507.5, Procedure II
Shock:	MIL-STD-810G, Method 516.6, Procedure I
Vibration:	MIL-STD-202F, Method 204D Cond. B
Acoustic Noise Susceptibility	MIL-STD-810G, Method 515.6, Procedure I Figure 516.6A-1
Fungus	MIL-STD-810G, Method Method 508.2



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