



Planar Monolithics Industries, Inc.

RF & Microwave Components and Modules to 40GHz

ISO9001:2008 Certified

May 21, 2014

2.0 to 18.0GHz CW Immune SDLVA with Linear & Limited RF Outputs PMI Model No. SDLVA-3G18G-CW-70-MAH

PMI Model No: SDLVA-3G18G-CW-70-MAH is a CW-Immune Successive Detection Log Video Amplifier operating in the 2.0 to 18.0GHz frequency band. It features an SPST on the RF output which allows for the RF to be blanked when the RF input signal is below the -64dBm threshold. In addition to RF blanking, a 3.3V TTL-compatible output is also provided for time-gating or sampling to assist in digital system integration. This model also offers both a linear and limited RF output channel.



| | |
|--|---------------------------------------|
| Frequency Range | 2.0 to 18.0GHz |
| Frequency Flatness | ±2.0 dB max. |
| TSS | -68dBm min., -70dBm typ |
| Limited Output Power | 6.5dBm ±3.0dB max. |
| VSWR | 2.0:1 max |
| Linear Output Gain | 43db ±3.0dB max. |
| Linear Output Psqt | 3dBm ±3.0dB max. |
| V0 (Video Comparator Signal Amplitude) | 3.3V typ |
| Video Comparator Delay | 50ns typ |
| Video Comparator Threshold Level | -64dBm ±3.0dB max. |
| V1 (Log Video Signal Amplitude) | 1 Volt max |
| Log Slope | 10mV/dB into a 50 ohm Load (±1mV) max |
| Log Range | -65 to +5dBm min |
| Log Linearity | ±1.75dB (-40°C to +85 °C) max |
| Pulse Range | 100ns to 250 us |
| Rise Time | 35ns max |
| Settling Time to ±1dB | 50ns typ |
| Recovery Time | 200ns max (150ns typ) |
| CW Immunity Range | TSS to -45dBm (1dB degradation) |
| Pulse Considered "CW" | 1ms typ |
| Rejection Time | 1ms typ |
| Droop | 1dB max |
| SPST Isolation | 70dB typ |
| SPST Switch Speed | 20ns typ |
| Power Supply | ±12 VDC to ±15 VDC |
| Connectors | SMA Female |
| Finish | Gold |
| Size | 2.30" x 2.20" x 0.36" |

PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F Grove Road, Frederick,
Maryland 21704 USA |

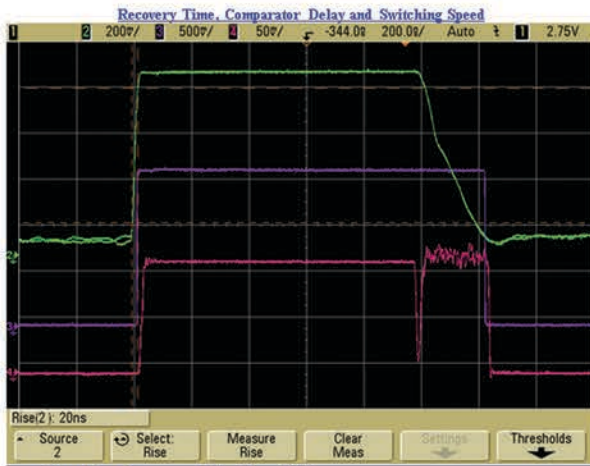
Tel: 301-662-5019 | Fax: 301-662-1731

4921 Roberts J. Mathews Parkway
Suite 1 El Dorado Hills, CA 95762 USA

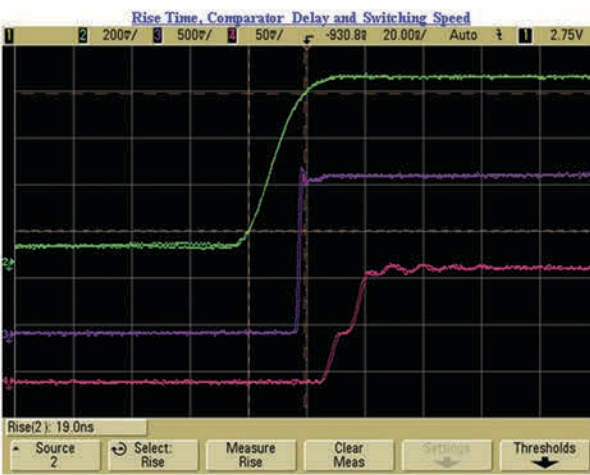
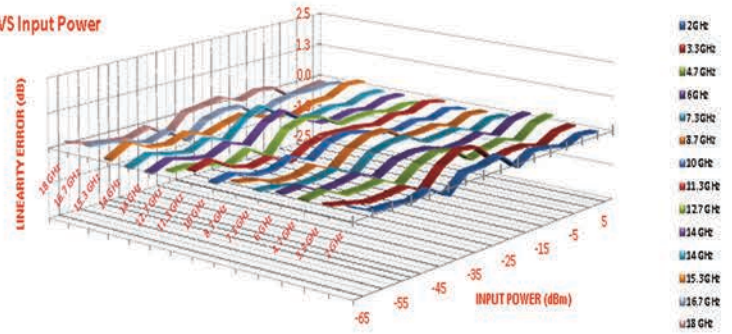
Tel: 916-542-1401 | Fax: 916-265-2597

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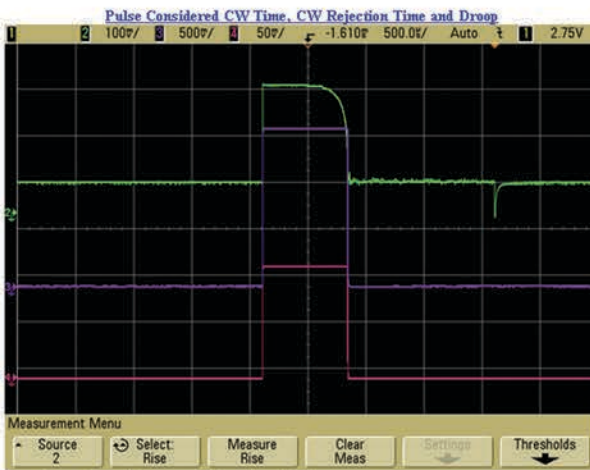
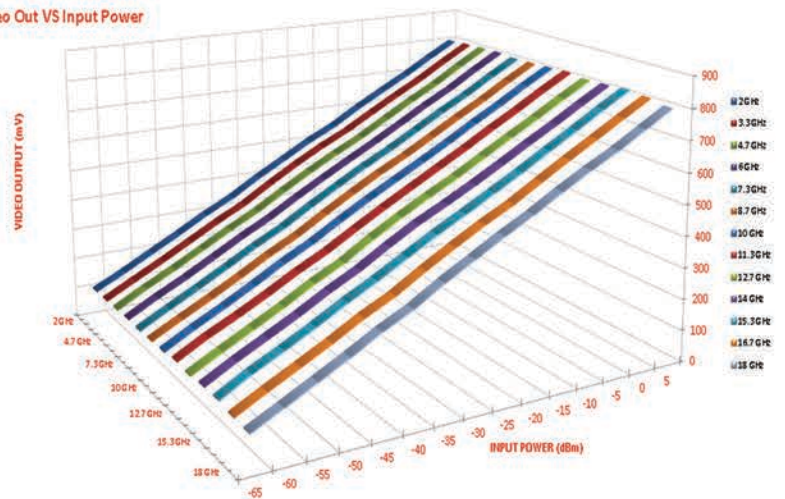
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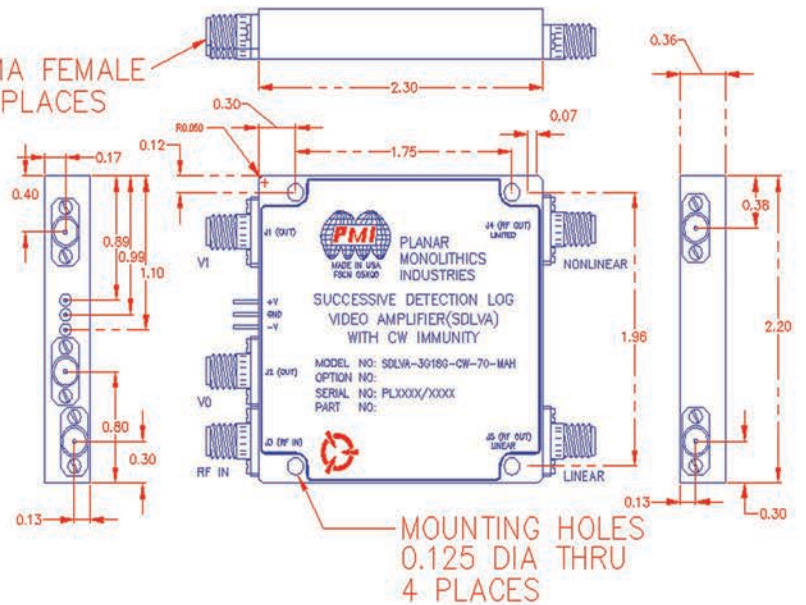
Linearity Error VS Input Power



Video Out VS Input Power



SMA FEMALE
5 PLACES



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