



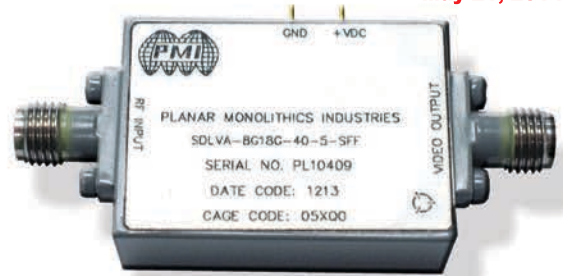
# Planar Monolithics Industries, Inc.

RF & Microwave Components and Modules to 40GHz

ISO9001:2008 Certified

May 21, 2014

## 8.0 to 18.0GHz SDLVA with Temperature Compensation PMI Model No. SDLVA-8G18G-40-5-SFF



PMI Model No. SDLVA-8G18G-40-5-SFF is an 8-18GHz Successive Detection Log Video Amplifier that is supplied in a ruggedized, hermetically sealed housing that measured only 1.2"L x 0.85"W x 0.4"H. This model operates on a single +5VDC supply and consumes less than 130mA of current. This model is highly temperature compensated such that the log linearity is better than +/-1dB over the temperature range of -54 to +85 degrees C. This model has a logging range of -40dBm to 0dBm with an output log video voltage of 10mV to 2.25V. This model features a fast rise / fall time of 25ns/30ns and a recovery time of less than 40nsec. This unit is listed as having an operating temperature range of -54 to +85 degrees C, but is designed to operate at extended temperature ranges up to +95 degrees C.

|                                |  |
|--------------------------------|--|
| Frequency Range                | 8.0GHz to 18.0GHz                            |
| Frequency Flatness             | ±2.0 dB max.                                 |
| Log Linearity over Temperature | ±1.0 dB (Pin = -30dBm @ -54 to +85 deg. C)   |
| Logging Range                  | -40 to 0dBm                                  |
| Input VSWR                     | 2.5:1 max.                                   |
| Maximum RF Input               | +10dBm CW (Survival)                         |
| Log Video Output Voltage       | 10nV to 2.25V                                |
| Log Video Output Slope         | 50mV/dB (±6.0mV/dB max.)                     |
| Log Video Output Rise Time     | 25nsec (Pin = -20dBm @ 10% to 90%) max.      |
| Log Video Output Fall Time     | 30nsec (Pin = -20dBm @ 90% to 10%) max.      |
| Log Video Recovery Time        | 40nsec (Pin = -20dBm) max.                   |
| Operating Voltage              | +5V ± 5% (max. Ripple 100mV pk-pk, 20MHz BW) |
| Operating Current              | 130mA max.                                   |
| Sealing                        | Hermetic                                     |
| Finish                         | MIL-SPEC Epoxy paint, Gray Color             |
| Weight                         | 0.9 Ounces max.                              |
| Connectors                     | SMA Female                                   |
| Dimensions                     | 1.20" x 0.85" x 0.40"                        |

## PLANAR MONOLITHICS INDUSTRIES, INC.

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

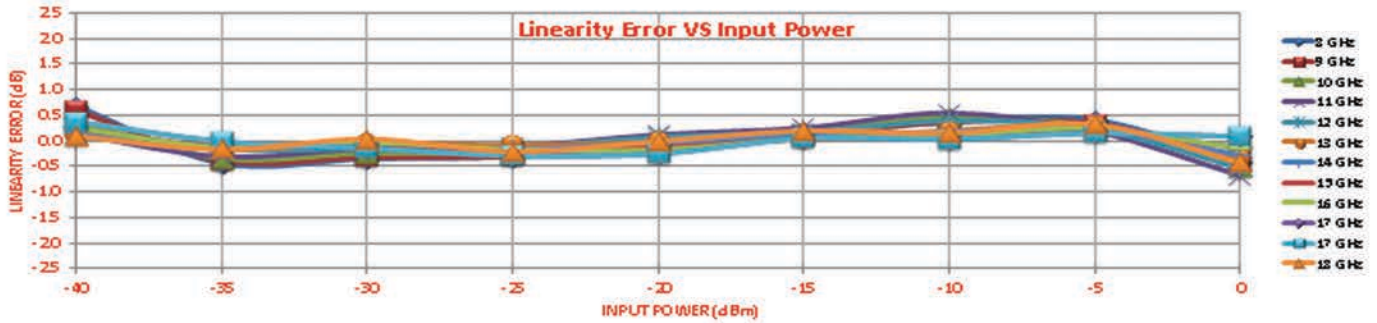
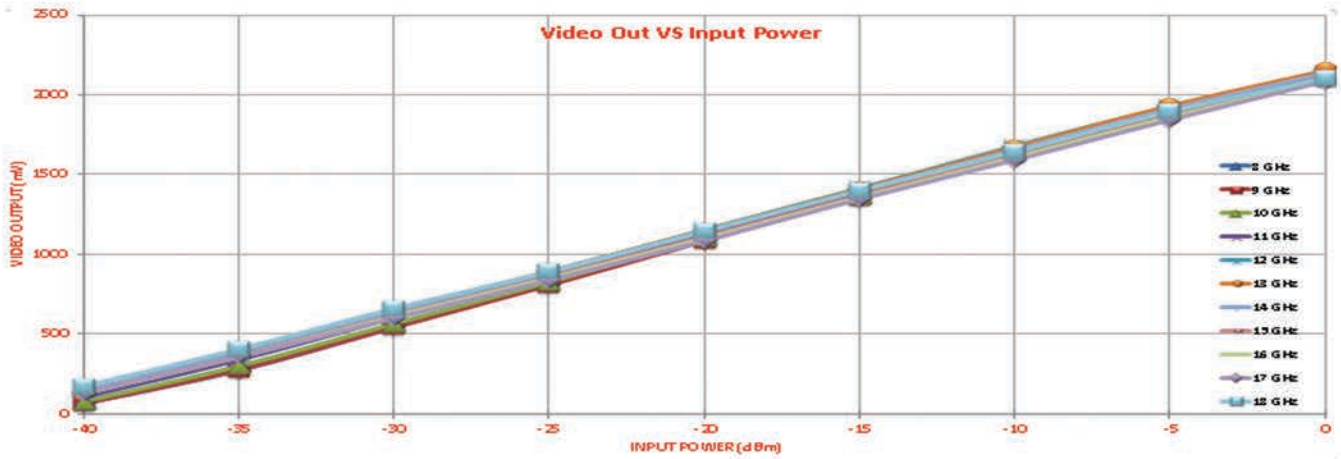
Tel: 301-662-5019 | Fax: 301-662-1731

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

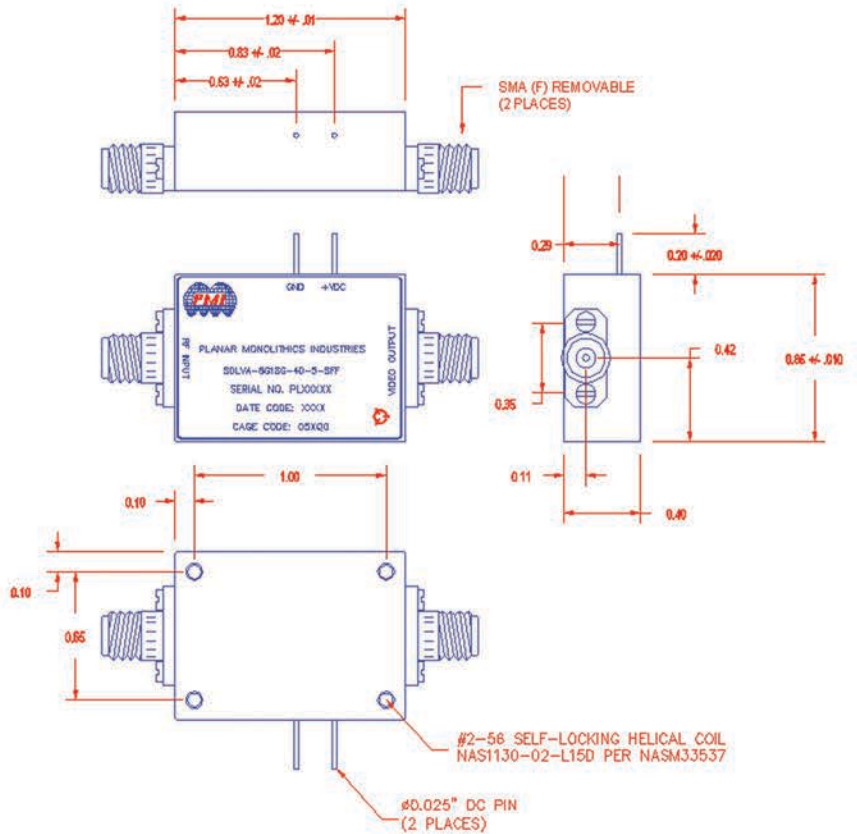
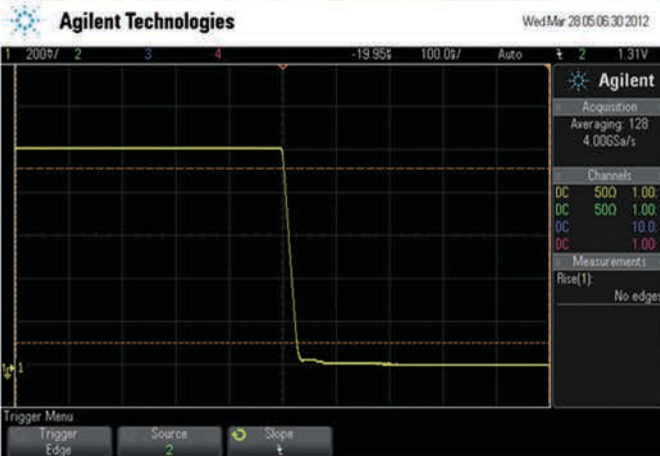
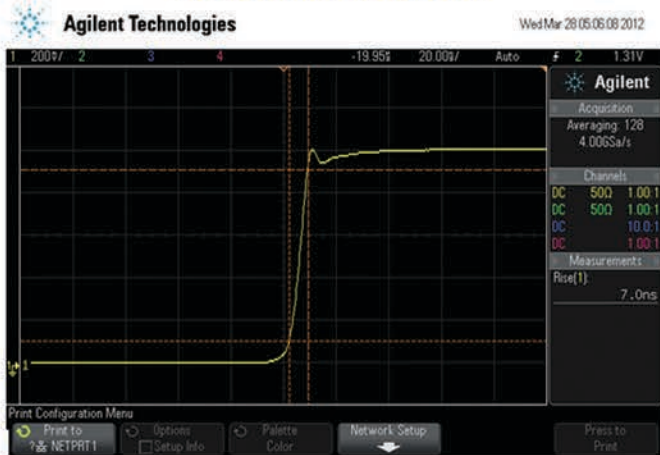
Tel: 916-542-1401 | Fax: 916-265-2597

Email: [sales@pmi-rf.com](mailto:sales@pmi-rf.com) | [www.pmi-rf.com](http://www.pmi-rf.com)

ISO9001:2008 Certified



**RISE & FALL @ 25°C / 0dBm**



**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

Email: sales@pmi-rf.com | www.pmi-rf.com  
ISO9001:2008 Certified