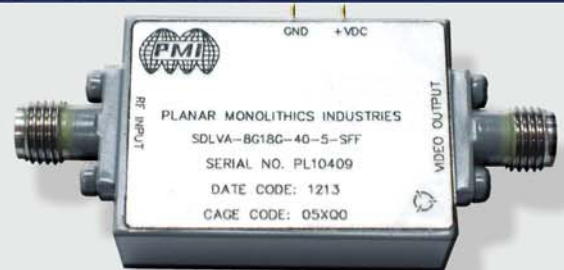




Planar Monolithics Industries, Inc.

RF & Microwave Components and Modules to 40GHz

**SDLVA, 8-18GHz with Temp. Comp.
PMI Model No. SDLVA-8G18G-40-5-SFF**



PMI Model 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.

Specifications:

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"

Environmental Ratings:

Temperature:	-55°C to +95 °C Operating - Base Plate -55 °C to +125 °C Non-Operating
Humidity:	MIL-STD-202F, Method 103B Cond. B
Shock:	MIL-STD-202F, Method 213B Cond. B
Altitude:	MIL-STD-202F, Method 105C Cond. B
Temperature Cycle:	MIL-STD-202F, Method 107D Cond. A



PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F Grove Road, Frederick, Maryland 21704 USA | Tel: 301-662-5019 | Fax: 301-662-1731

Email: sales@pmi-rf.com | www.pmi-rf.com

ISO9001:2008 Certified