

EXTENDED RANGE DLVA ASSY (continued)

ELECTRICAL SPECIFICATIONS

Frequency Range

1 to 18 GHz

Max. RF Input Power

5W CW

Max. Peak (1 μ s width: 1 kHz PRF)

500W peak

Max. RF Bite Input

0 dBm

TSS (20 MHz Video BW)

-70 dBm

SP2T RF Switch Isolation

60 dB min.

Switching Controls

Logic "O" port "ON"

Switching Time

200 nSec max.

Switch Control Video Leakage

Less than video level corresponding to 66 dBm

RF Output

0 dBm min. at -40dBm input
2nd harmonic level 7 dBc min.

DLVA Type

DC Coupled Extended Dynamic Range

Logging Range

-67 to 0 dBm

Video Output

300 mV @ -65 dBm with SNR of 14 dB

Video Output at 0 dBm

5.7V max.

Log Slope 70 mV typ**Output Response** Monotonic**Log Linearity (-65 to 0 dBm)**

\pm 1.0 dB Typ.
 \pm 1.5 dB @ 87.8%
 \pm 1.8 dB max.

Log Accuracy (for set of 10 units)

\pm 2.5 dB @ 94%
 \pm 3.0 dB

DC Offset

\pm 60 mV

DC Offset Tracking (for set of 10 units)

60m V p-p

Frequency Flatness

\pm 1.5 dB @30%
 \pm 2.0 dB @ 90%
 \pm 2.5 dB max.

Pulse Width

50 nsec to 150 μ sec

PRF

50 Hz to 250 kHz

Recovery Time

350 nsec @ 0 dBm
PW = 150 μ sec

Rise Time

20 nsec

Settling Time

35 nsec

IN/OUT VSWR

2:1 @ 85% of band
2.5:1 @ 95% of band
3:1 max.

Filter Response

Filter Pass Band 1 to 18 GHz

Filter Rejection (DC to 850 MHz)
60 dBc

Output Video Load

50 ohm

DC Power Protected for Reverse Polarity Over Voltage up to \pm 18V Short Circuit Protection and EMI/EMC

-15 VDC; 1.3A max.
(1A Typ)

-15 VDC; 300 max.

Connectors

RF Input, Bite, Video
SMA Jack

Supply & Control

D Type

Matching (for set of 10 units)

\pm 2 @ 80%
 \pm 2.5 dB max

Operating Temp. Range

-40 to 85°C

Shock

MIL-STD-202

Vibration

MIL-STD-202

Relative Humidity

95%

Screening

MIL-STD-883B

EMI/EMC

MIL 461C

Mechanical Size

5.5 x 3.5 x 0.6"