

# Extended Range DC -Coupled DLVAs

## DFX - Series

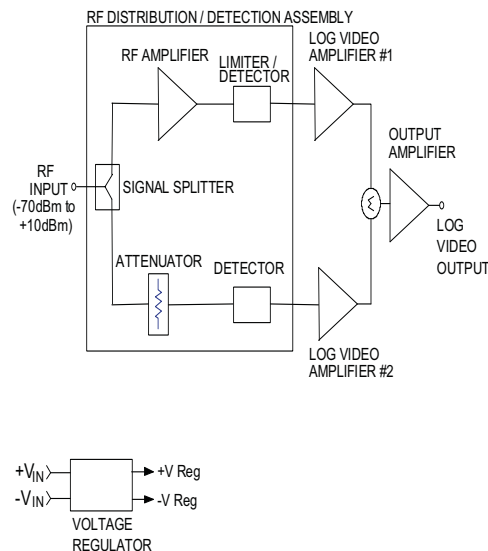
80 dB Dynamic Range, -70 dBm to +10 dBm

Exceptional Linearity:  $\pm 0.5$  dB

200 nsec. Recovery From +10 dBm

**DESCRIPTION** The Microphase 80 dB Extended Range DC-Coupled DLVA's serve an essential function in modern radar and electronic warfare systems. This logarithmic amplifier compresses much larger input dynamic range into a small output dynamic range. The most common war applications within radar are EW systems are direction finding and power monitoring.

**ADVANTAGES** The Microphase DFX-Series provides exceptional linearity ( $\pm 0.5$ dB), and 200 nsec. recovery from +10 dBm You get excellent electrical performance, environmental stability and mechanical reliability. This light weight unit can be adapter for custom configurations. Very compact and rugged, all of our products are 100% tested, and readily available.



### SPECIFICATIONS

	DFX-328	DFX-3618	DFX-2520
Frequency Range	2.0- 8.0 GHz	6.0-18.0 GHz	0.5-2.0 GHz
Flatness @ -23 dBm	$\pm 1.0$ dB	$\pm 1.75$ dB	$\pm .75$ dB
VSWR	2.0:1 max.	2.0:1 max.	2.0:1 max.
Tangential Signal Sensitivity (TSS)	-73 dBm min.	-72 dBm min.	-73 dBm min.
Logging Range	-70 dBm to +10 dBm	-70 dBm to +10 dBm	-70 dBm to +10 dBm
Log Slope*	25 mV/dB	25 mV/dB	25 mV/dB
Log Linearity	$\pm 0.5$ dB -70 dBm to +24 dBm $\pm 1.0$ dB to +10 dBm	$\pm 0.5$ dB -70 dBm to +24 dBm $\pm 1.25$ dB to +10 dBm	$\pm 0.5$ dB -70 dBm to +24 dBm $\pm 1.0$ dB to +10 dBm
Output Stability (-54°C to +85°C)	$\pm 1.0$ dB	$\pm 1.0$ dB	$\pm 1.0$ dB
Pulse Width Range	30 nsec. to CW	30 nsec. to CW	30 nsec. to CW
Rise Time	20 nsec. max.	20 nsec. max.	20 nsec. max.
Recovery Time (for +15 dBm accuracy)	300 nsec. max. (to +15 dBm)	300 nsec. max. (to +10 dBm)	200 nsec. max. (to +10 dBm)
Video Load	100 Ohms	100 Ohms	100 Ohms
Power (no signal)	+12V $\pm 5\%$ ;240 mA max. -12V $\pm 5\%$ ; 100 mA max.	+12V $\pm 5\%$ 490 mA max. -12V $\pm 5\%$ ; 110 mA max.	+12V $\pm 5\%$ ;240 mA max. -12V $\pm 5\%$ ; 100 mA max.
Operating Temperature	-54°C to 85°C	-54°C to 85°C	-54°C to 85°C
Size (excluding connectors)	2.60" x 2.20" x 0.40"	3.25" x 2.85" x 0.50"	2.60" x 2.20" x 0.40"
Connectors	SMA and Pins	SMA and Pins	SMA and Pins

\* Other Log Slopes are Available

*These units can be designed to your specification. Please contact Microphase for your special design requirements.*