DFH-Series A

High Speed DC Coupled DLVA's 0.5 - 18 GHz

Small Size
Low Profile
Process Narrow Pulses
Handles High Duty Factors
Detect Low Level Signals in Dense Environments

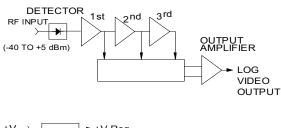


DESCRIPTION The Microphase High Speed DC Coupled DLVA DFH Series A serve an essential function in modern radar and electronic warfare systems, This logarithmic amplifier compresses a much larger input dynamic range into a small output dynamic range. The most common application within radar and EW systems are direction finding and power monitoring.

ADVANTAGES The Microphase designed and engineered DFH-Series A DLVA's have the ability to process narrow pulses, handle high duty factors and detect low-level signals in dense environments. They provide precision accuracy, excellent electrical performance, environmental stability and mechanical reliability. Very compact and rugged, all of our products are 100% tested, and readily available.

AVAILABLE OPTIONS

- Input offset option available to counteract detector RF noise rectification
- Linear output option available (sensitivity: 7.5 mV/ μ watt nom.)



+V _{IN} → +V Reg -V _{IN} → -V Reg VOLTAGE REGULATOR

SPECIFICATIONS

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Model	DFH2540 A	DFH3112 A	DFH3818 A	DFH3218 A			
Frequency Range	0.5 - 4.0 GHz	1.0 - 12.0 GHz	8.0 - 18.0 GHz	2.0 - 18.0 GHz			
Flatness (dB) nom. @ -23 dBm	±0.4	±1.0	±0.7	±1.0			
Tangential Signal Sensitivity (TSS)	-44	-43	-42	-42			
Log Slope ²		50 mV/dB					
Log Linearity (0 to -40 dBm)		±0.3 dB					
Output Level Stability (-54°C to +85°C)		±0.75 dB					
Rise Time @ TSS + 10 dB		20 nsec. max.					
Recovery Time (to within ± 1 dB of baseline)		250 nsec. max.					
Video Load	100 Ohms						
Power		+15V 65 mA no signal					
		95 mA max. CW					
		-15V 60 mA no signal					
			60 mA max. CW				
Size (excluiding conectors)	2.17" x 2.00" x 0.40"						
Connectors		SMA and Pins					

- 1. Other frequency ranges available
- 2. 100 mV/dB optional (maximum Rise Time 25 ns)

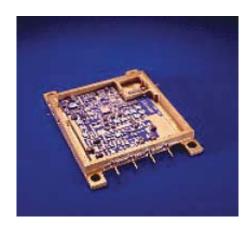
DFH-Series M

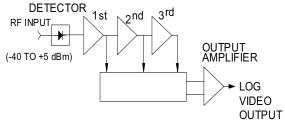
Miniature Detector Logarithmic Video Amplifier

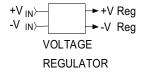
Excellent High-Speed and
Electrical Performance
Superior Performance
Precision Accuracy
Very Compact
Process Narrow Pulses

DESCRIPTION The DFH-Series M Miniature Detector Logarithmic Video Amplifier (DLVA) provides excellent sensitivity and wide dynamic range. Demodulates transmitted data and compresses it such that this output voltage increases in linear increments with respect to RF input power. This device is the result of the integration and hybridization of various technologies that yield a high performance device in a very small size.

ADVANTAGES The advantage of a Microphase designed and engineered DLVA's provide precision accuracy, excellent electrical performance, environmental stability and mechanical reliability. Very compact and rugged, all of our products are 100% tested, fully productized and readily available.







SPECIFICATIONS

Model	DFH2540M	DFH3112M	DFH3818M	DFH3218M			
Frequency Range	0.5 - 4.0 GHz	1.0 - 12.0 GHz	8.0 - 18.0 GHz	2.0 - 18.0 GHz			
Flatness (dB) nom. @ -23 dBm	±0.4	±1.0	±0.7	±1.0			
Tangential Signal Sensitivity (TSS) (dBm) min.	-43	3 -43 -42 -42					
Log Slope ²	50 mV/dB						
Log Linearity (0 to -40 dBm)	±0.3 dB						
Output Level Stability (-54°C to +85°C)	±0.75 dB						
Rise Time @ TSS + 10 dB	20 nsec. max.						
Recovery Time (to within ± 1 dB of baseline)		250 nsec.					
Video Load	100 Ohms						
Power	+15V 65 mA no signal 95 mA max. CW -15V 60 mA no signal 60 mA max. CW						
Size (excluding pins)	1.25" x 1.25" x 0.15"						

- 1. Other frequency ranges available
- 2. 100 mV/dB optional

AVAILABLE OPTIONS

- Input offset option available to counteract detector RF noise rectification
- Linear output option available (sensitivity: 7.5 mV/μ watt nom.)