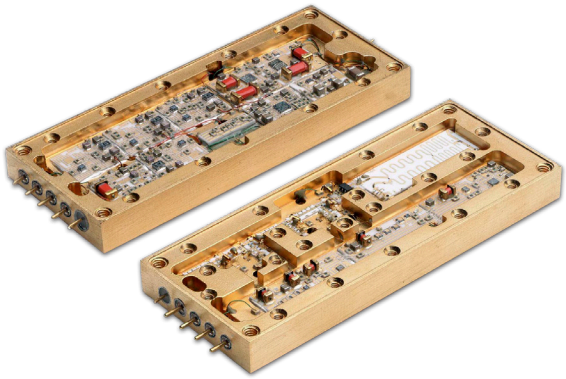
Log IF Amplifiers with Limited RF Output

Datasheet 165

KEY PERFORMANCE FEATURES

- **Limited RF Output**
- **Wide Dynamic Range**
- **Flat Frequency Response Over 0.5 - 2 GHz**
- **Excellent Log Linearity**
- **Low Log Slope Variation**
- **Excellent VSWR**
- **EAR 99 Export Classification**



PRODUCT DESCRIPTION

AKON has developed a new series of Log IF Amplifiers that operate over a variety of bands between 0.5 to 2 GHz frequency range. This new line offers excellent linearity over a dynamic logging range of dB and comes with a compact ruggedized package.

AKON products are designed to withstand the demanding environments of Military, Space and Industrial applications. Our compact and ruggedized products are designed to handle stringent mechanical shock/vibrations, temperature cycling, altitude and temperature extremes.

Reliability is a key feature of AKON products and to ensure this we perform ESS testing on all of our products. AKON offers an off-the-shelf screening option called its **"H"** series, per Mil-STD-883 level B that is available on all of its RF & Microwave Components. **For custom electrical, mechanical, and screening options, please contact AKON Sales: sales@akoninc.com (or) 408-432-8039.**

SPECIFICATIONS:

Model Number	A16-OH003	A16-1H004	A16-MH005
Frequency Range (GHz)	0.5 - 1	1 - 2	0.5 - 2
T.S.S. (dBm)	-72	-72	-72
Logging Range (dBm)	-65 to 0	-65 to 0	-65 to 0
Frequency Flatness (dB)	+/- 1.0	+/- 1.0	+/- 1.25
Limited Output (dB)	+5 +/- 2.0	+5 +/- 2.0	+5 +/- 3.0
Harmonics (dBc)	8 (nom)	8 (nom)	8 (nom)
Log Linearity (dB)	+/- 1.0	+/- 1.0	+/- 1.0
Temperature Variation (dB)	+/- 1.0	+/- 1.0	+/- 1.0
Rise Time (nS)	10	10	10
Propagation Delay (nS) (50% RF to 10% Video)	10	10	10
Recovery Time (nS)	60	60	60
Log Slope (mV/dB)	15	15	15
Coupling	DC	DC	DC
Operating Temperature (ºC)	-40 to +85	-40 to +85	-40 to +85
VSWR	2.0:1	2.0:1	2.0:1

AKON, Inc. and it's affiliates reserve the right to make changes to the product(s) or information contained herein without notice. All products are measured in 50-ohm system, over a temperature Range of -54° to +85° C.
Note: All dimensions are specified in inches (mm)

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SPECIFICATIONS (CON'T):

Model Number	A16-OH003	A16-1H004	A16-MH005
Power SupplyCurrent (mA)			
+15 (VDC)	+340 (typ)	+340 (typ)	+340 (typ)
-15 (VDC)	-125 (typ)	-125 (typ)	-125 (typ)
Size	Figure 1	Figure 1	Figure 1

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OUTLINE DRAWING:

FIGURE 1