

0.5 to 18 GHz DLVAs with 45 dB Dynamic Range

Datasheet 124A

KEY PERFORMANCE FEATURES

- Broad Frequency Range Coverage
- Small Size
- Ruggedized Packaging
- Fast Rise and Fall Times
- Excellent Absolute Accuracy
- Small Log Slope Variation
- EAR 99 Export Classification



PRODUCT DESCRIPTION

AKON Introduces a complete line of 45 dB dynamic logging

range DLVA products. These products operate in bands across

the 0.5 to 18 GHz frequency range. These DLVAs have excellent log slope variation, thus provides excellent absolute accuracy. AKON's DLVAs have fast rise and fall times of 20 nS and 150 nS typically.

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 problems. AKON offers an off-the-shelf screening option called it's "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.

Parameter	A15-ML053	A15-ML054	A15-ML055	A15-ML089
Frequency Range (GHz)	0.5 - 2	2 - 6	2 - 18	2 - 18
T.S.S. (dBm)	-44	-43	-42	-42
Logging Range (dBm)	-40 to +4	-40 to +4	-40 to +4	-40 to +4
Frequency Flatness (dB)	+/- 0.75 (typ)	+/- 1.0 (typ)	+/- 1. 5 (typ)	+/- 1. 5 (typ)
VSWR	2.2:1	2.7:1	3.2:1	3.2:1
Log Linearity (dB)				
-40 to 0 (dBm)	+/- 0.5 @ 25° C +/- 1.00 @ -40 to +85° C	+/- 0.5 @ 25° C +/- 1.00 @ -40 to +85° C	+/- 0.5 @ 25° C +/- 1.00 @ -40 to +85° C	+/- 0.5 @ 25° C +/- 1.00 @ -40 to +85° C
0 to +4 (dBm)	+0.5 to -1.2 @ 25° C +0.65 to -1.40 @ -40 to 85° C	+0.5 to -1.2 @ 25° C +0.65 to -1.40 @ -40 to 85° C	+0.5 to -1.2 @ 25° C +0.65 to -1.40 @ -40 to 85° C	+0.5 to -1.2 @ 25° C +0.65 to -1.40 @ -40 to 85° C
Log Slope (mV/dB) For Linerity Measurement	50 +/- 1	50 +/- 1	50 +/- 1	70 +/- 1
Rise Time (nS)	20 (typ)	20 (typ)	20 (typ)	20 (typ)
Fall Time (nS)	150 (typ)	150 (typ)	150 (typ)	150 (typ)
Recovery Time (nS) (90% to +/- 1.0 dB of Baseline)	300	300	300	300

SPECIFICATIONS:

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 -40° to +85° C.

Note: All dimensions are specified in inches (mm)



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Parameter	A15-ML053	A15-ML054	A15-ML055	A15-ML089
Propagation Delay (nS) (50% RF to 10% Video)	20 (typ)	20 (typ)	20 (typ)	20 (typ)
Power Supply Current (mA)				
+12 (VDC)	100	100	100	100
-12 (VDC)	125	125	125	125
Coupling	DC	DC	DC	DC
Video Load (ohms)	93 +/-1	93 +/-1	93 +/-1	93 +/-1
Size (Inches)	2.5" x 1.5" x 0.44"			
Operating Temperature (°C)	-40 to +85	-40 to +85	-40 to +85	-40 to +85

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OUTLINE DRAWING



