

## 160 MHz ULTRA-MINIATURE LOGARITHMIC AMPLIFIER



**120 MHz to 200 MHz**  
**Log Linearity at 160 MHz +/-1.0dB**  
**Linearity over Temperature**  
**and Frequency +/- 2.0dB max**

The Pascall Ultra-Miniature series of Logarithmic Amplifiers provide broadband performance and superb linearity over a wide temperature range.

The UMSD range of logarithmic amplifiers are robustly constructed in lightweight aluminium alloy housings and are designed to withstand harsh mechanical environments.

This range is specified for operation over a case temperature range of -45°C to +85°C. Supply voltage options are +/- 12 Volts and +/- 15 Volts with a total dc input power of 2.7 Watts.

The small size and weight makes these units an ideal choice for compact airborne equipment designs where low power dissipation is vital to maintain high reliability and performance.

Pascall has a large range of alternative logarithmic amplifiers covering centre frequencies from 10 MHz to 1 GHz and is also able to design models to meet customers' specific requirements.

**160 MHz ULTRA-MINIATURE LOGARITHMIC AMPLIFIER**

<b>Frequency Range</b>	120 - 200 MHz
<b>Dynamic Range</b>	-65 to +5dBm min
<b>Linearity Over Frequency @ 25°C</b>	+/- 1.0dB
<b>Over Frequency and Temp</b>	+/- 2.0dB max
<b>Variation of Log Slope (over freq and temp -45 to +85°C)</b>	+/- 5% max
<b>Variation of Log Output (over freq and temp -45 to +85°C)</b>	+/- 30mV max
<b>Video Output @ 0dBm</b>	2.0V nominal
<b>Log Slope</b>	25mV / dB nominal
<b>Optional Electronic Offset Adjust</b>	+/- 100mV min
<b>Pulse Rise Time</b>	<20ns
<b>Pulse Fall Time</b>	<85ns
<b>Input VSWR</b>	2 : 1 max
<b>Power Supply</b>	*+12V or +15 Volts @ 60mA *-12V or -15Volts @ 120mA
<b>IF Limited Output</b>	0±2dBm
<b>Size</b>	63.5 x 25.4 x 10.3mm
<b>Weight</b>	28g
<b>Connectors</b>	SMA
<b>Case Temperature Range - operating</b>	*-45 to +85°C
<b>storage</b>	-55 to +100°C
	*options available

**Ordering Information**

**UMSDBB-16080-AXX-XXX**

