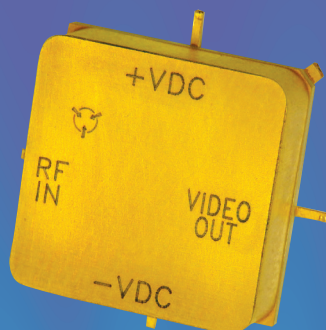


HIGH-PERFORMANCE LOGARITHMIC AMPLIFIER



MODEL: MLS-0206



APPLICATIONS

- ELINT radar warning receivers
- Weather radar
- Airport landing systems
- Channelized receivers (receive signal strength indicator)
- ESM systems
- EW systems

This 2 GHz to 6 GHz Surface-Mount Logarithmic Amplifier (Model MLS-0206) is just 0.45 inches x 0.45 inches. Manufactured using traditional MIC techniques, this device has a temperature range of -40°C to +85°C and is provided in a hermetic seam-welded package. The construction of the device promotes excellent RF and reliability performance, and it will meet MIL-STD-202 requirements for shock, vibration, humidity and altitude. Therefore, this new logarithmic amplifier is suitable both commercial and military applications, and space-qualified versions can be considered as well. The device has outstanding accuracy, and linearity, and its overall excellent RF performance is complemented by an internal regulation scheme.

SPECIFICATIONS

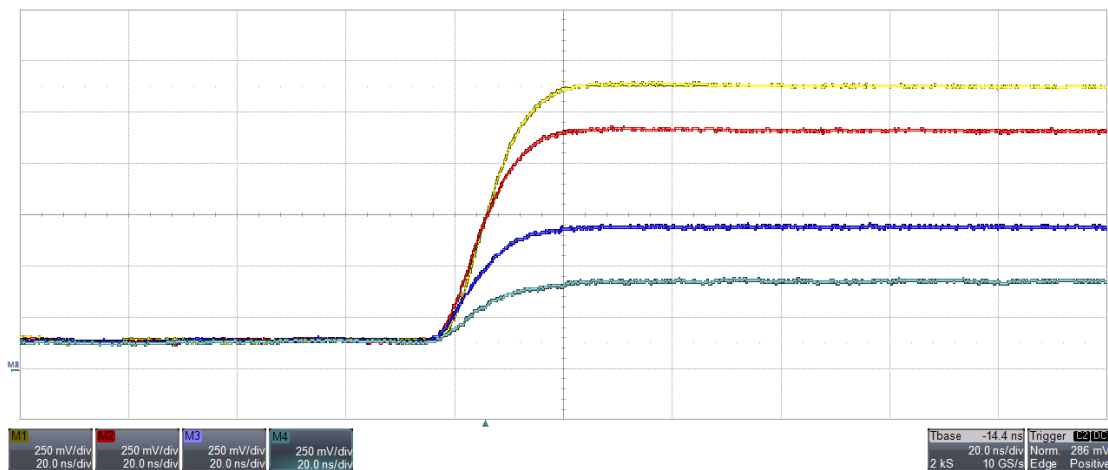
Frequency range	2 GHz to 6 GHz
Frequency flatness	< 1.5 dB at 25 °C
Input VSWR	< 1.75:1, typical
Logging slope	50 mV/dB nominal
Logging range	-50 dBm to 0 dBm to within ± 1.0 dB linearity error
TSS	-53 dBm typical
Rise time ¹	17.5 nS (maximum)
Settling time	35 nS to within ± 1 dB (maximum)
Recovery time	50 nS to within ± 2 dB of offset voltage
Supply voltage	± 8.0 VDC to ± 15 VDC at +73 mA/-22 mA with 0 dBm
Package size	Applied .45 square

Notes: Faster rise time available.

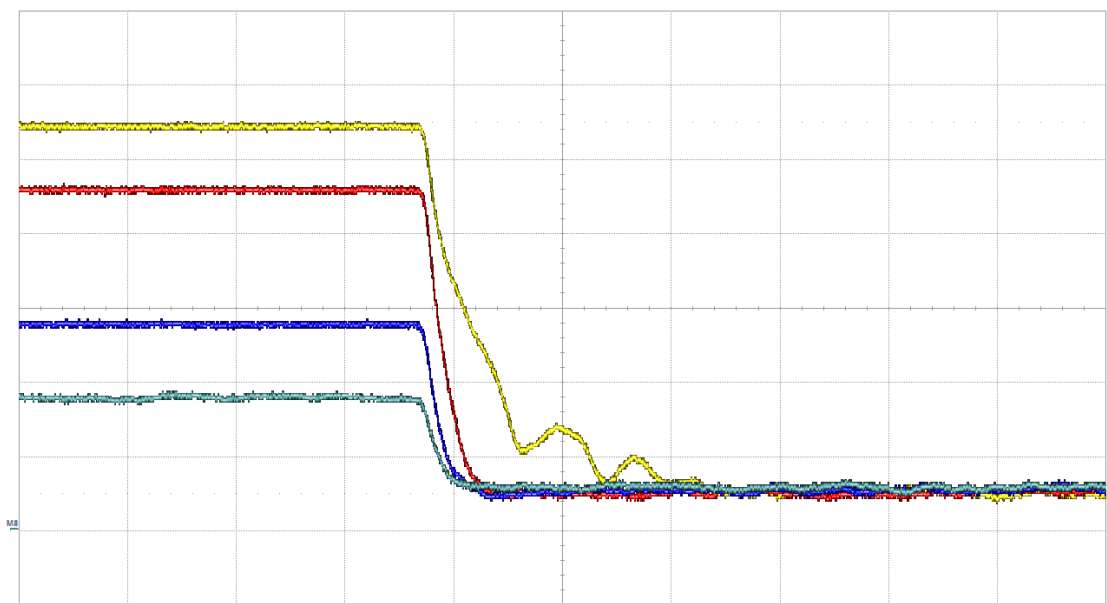


HIGH-PERFORMANCE LOGARITHMIC AMPLIFIER

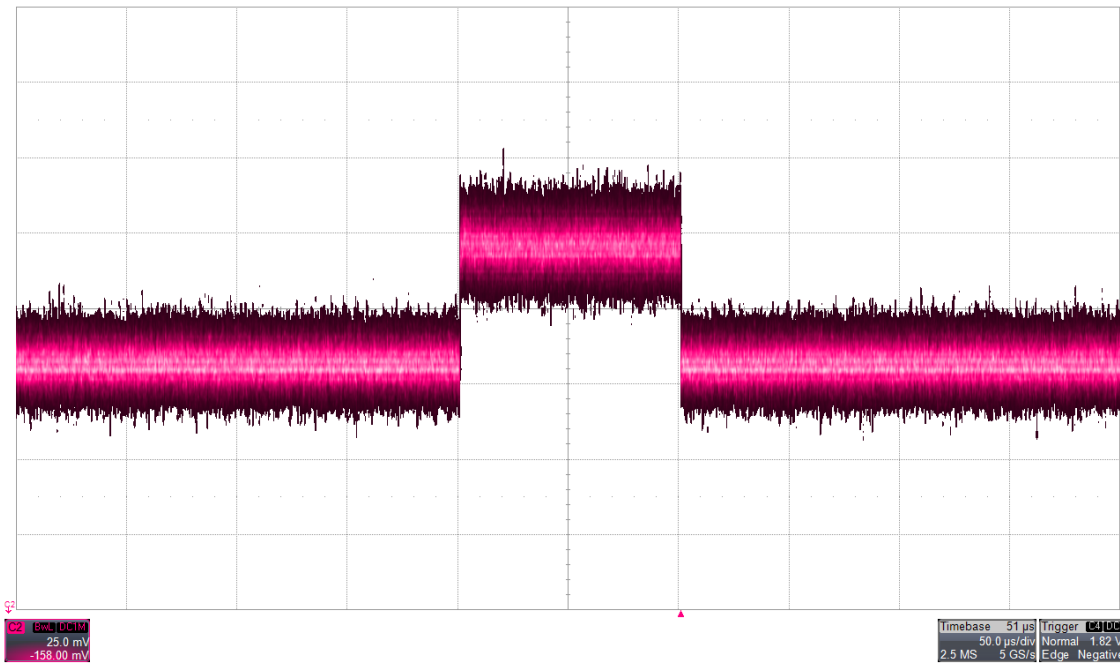
RISE TIME 6 GHz



FALL TIME 6 GHz

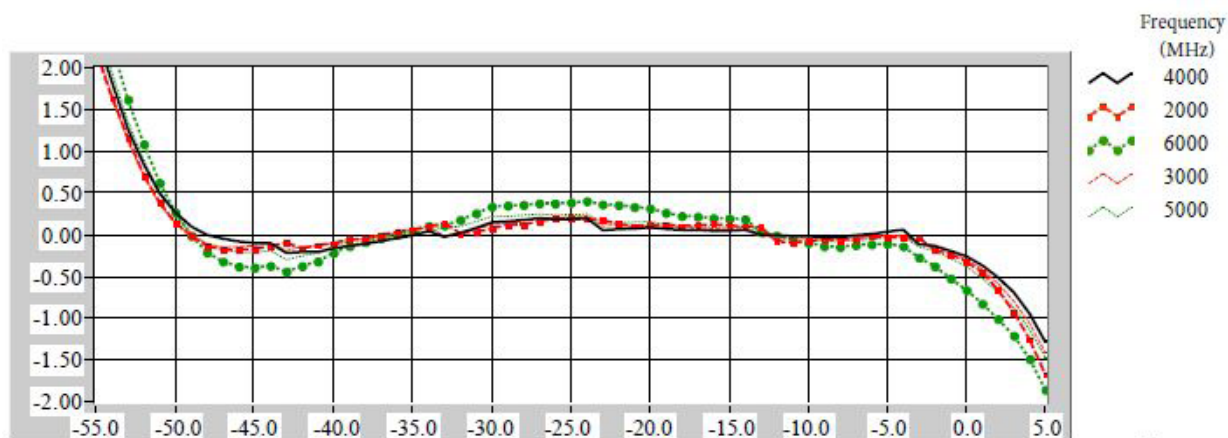


TSS
20 MHz, VBW, 6 GHz, -53 dBm



HIGH-PERFORMANCE LOGARITHMIC AMPLIFIER

LOG LINEARITY ERROR ACROSS 2 TO 6 GHz BANDWIDTH BFSL -50 dBm to 0 dBm



Log Linearity Error (dB) Y Axis, Vs Input Power (dBm) X Axis



Video Output (V) Y Axis, Vs Input Power (dBm) X Axis

The material presented in this datasheet was current at the time of publication. Narda-MITEQ's continuing product improvement program makes it necessary to reserve the right to change our mechanical and electrical specifications without notice. If either of these parameters is critical, please contact the factory to verify that the information is current.

This material consists of Narda-MITEQ general capabilities information and does not contain controlled technical data as defined within the International Traffic in Arms (ITAR) Part 120.10 or Export Administration Regulations (EAR) Part 734.7-11.

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