

ULTRAFAST WIDEBAND HIGH-FREQUENCY LOGARITHMIC AMPLIFIERS

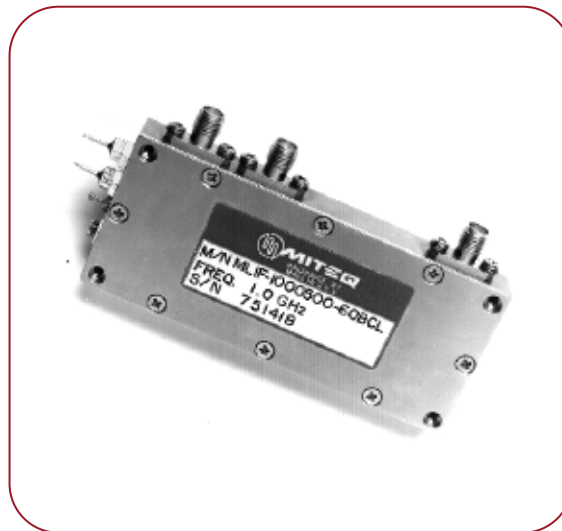
MODEL: MLIF SERIES

FEATURES

- 70 dB dynamic range at 1 GHz
- Improved sensitivity
- Rise time up to 1 ns
- Fast recovery time
- ± 1.5 dB video flatness over 500 MHz bandwidth
- Low output noise for increased accuracy
- Improved sensitivity through low noise figure input stages

OPTIONS

- Customized center frequencies and frequency agility
- Dynamic range and operational bandwidth
- Custom packaging
- Extended environmental limits
- Military screening available



MODEL NUMBER	CENTER FREQUENCY (MHz)	OPERATIONAL BANDWIDTH (MHz)	DYNAMIC RANGE (dBm)	TANGENTIAL SENSITIVITY (dBm)	VIDEO FLATNESS (\pm dB)	RISE TIME (ns)	FALL TIME (ns)	RECOVERY TIME (ns)
MLIF-500/100-70	500	100	-70 to 0	-73	1	5	15	25
MLIF-750/500-65	750	500	-65 to 0	-68	1.5	3	10	15
MLIF-900/100-75	900	100	-70 to +5	-73	1	10	30	45
MLIF-1000/500-60	1000	500	-60 to 0	-63	1	3	10	15
MLIF-1000/500-75	1000	500	-70 to +5	-73	2	10	30	45
MLIF-1500/500-60	1500	500	-60 to 0	-63	1.5	3	10	15
MLIF-1800/200-70	1800	200	-65 to +5	-68	1	10	30	45

ADDITIONAL SPECIFICATIONS

The above models are available in 'A, B, G, K and M' housings.

Linearity measured at center frequency and 25°C is ± 1 dB.

Add ± 0.5 dB over operating temperature of -40 to +85°C and ± 0.5 dB over operating bandwidth.

Slope is 15 mV/dB at center frequency and 25°C.

Slope variations of $\pm 5\%$ will occur over operating temperature of -40 to +85°C.

An additional $\pm 5\%$ variation will occur over operating bandwidth.

Video output is DC coupled and rated into 93 Ω .

DC offset drift over operating temperature of -40 to +85°C is ± 50 mV typical.

Input impedance is 50 Ω (VSWR < 1.5:1 typical).

Improved second-harmonic rejection on limited IF out.

Power: +12 VDC at 400 mA typical, -12 VDC at 75 mA typical.

ORDER OPTIONS

For ± 15 VDC, add suffix "C".

For limited IF output at 0 dBm nominal, (VSWR < 2.0:1 typical) add suffix "L".

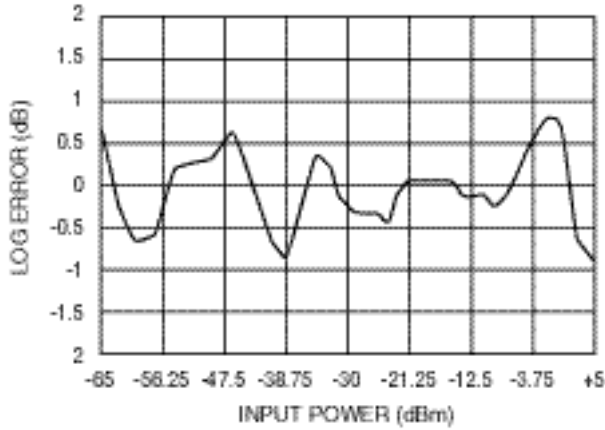
Typical part number: MLIF-1000/500-75BCL (for 'B' housing at ± 15 VDC with limited IF output).

NOTE: FOR MODIFICATION OF OUR STANDARD MODELS, PLEASE CONSULT FACTORY.

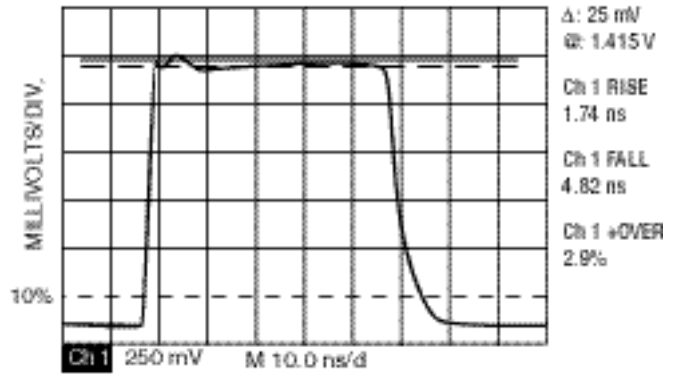


MLIF SERIES TYPICAL TEST DATA

LOG LINEARITY
(MLIF-1000/500-70)

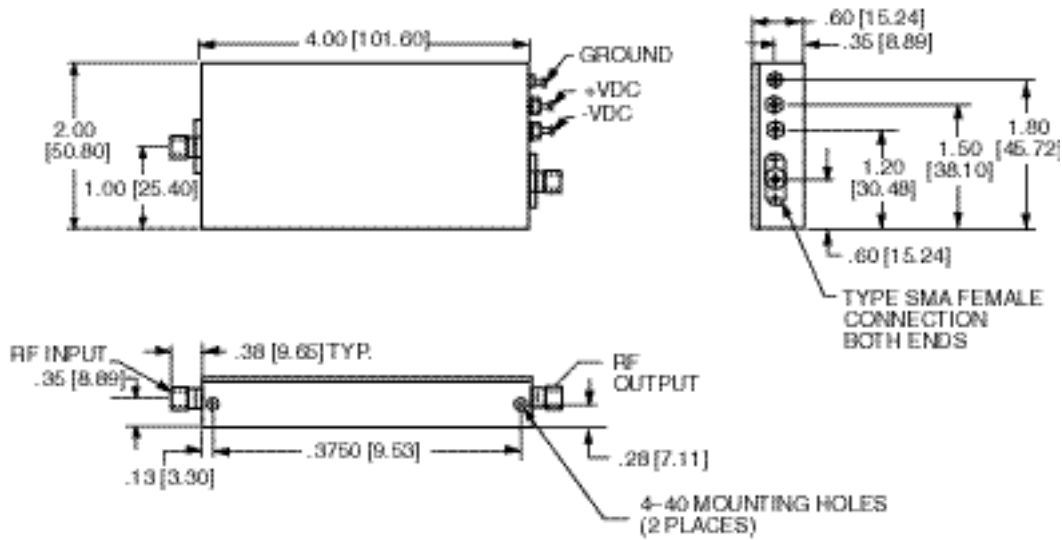


PULSE RESPONSE
(MLIF-1000/300-60)



MLIF SERIES OUTLINE DRAWINGS

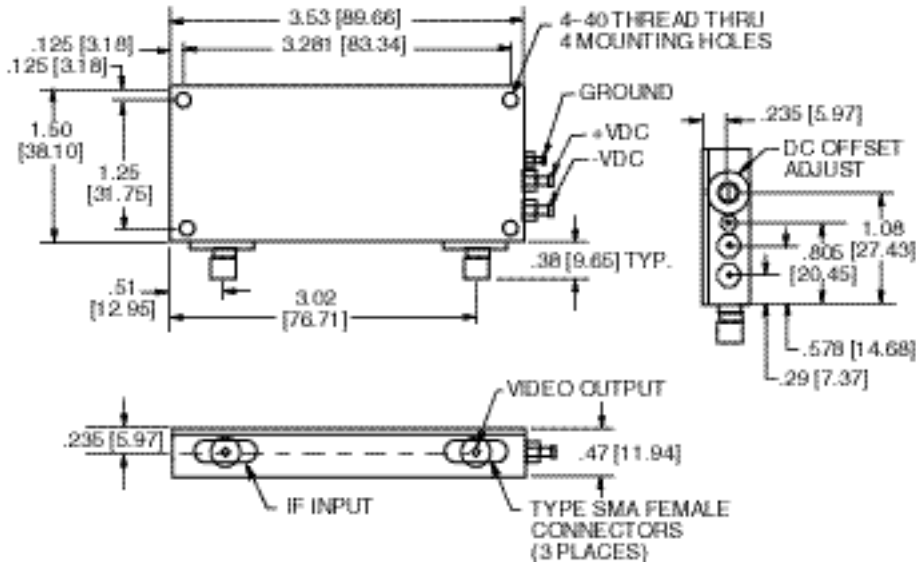
OUTLINE A



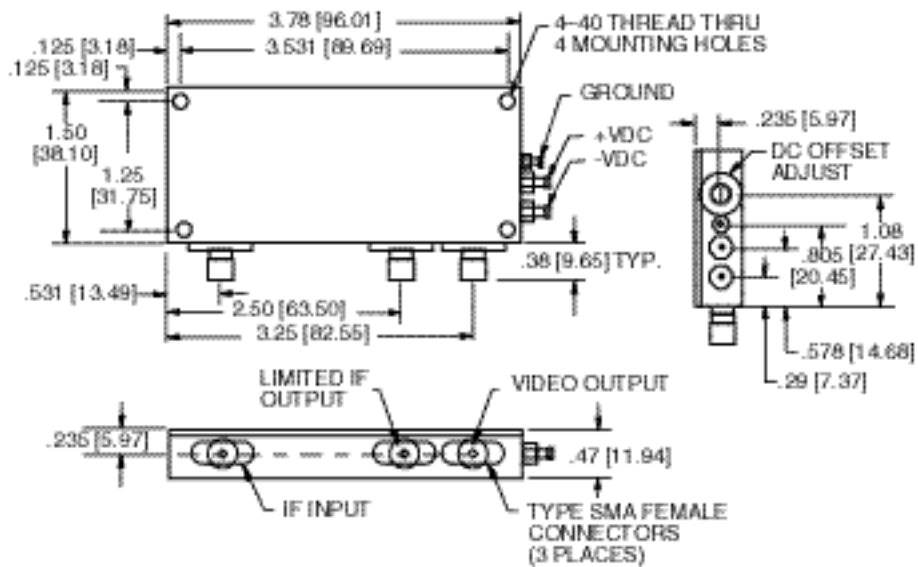
NOTE: DIMENSIONS SHOWN IN BRACKETS [] ARE IN MILLIMETERS.

MLIF SERIES OUTLINE DRAWINGS

OUTLINE B



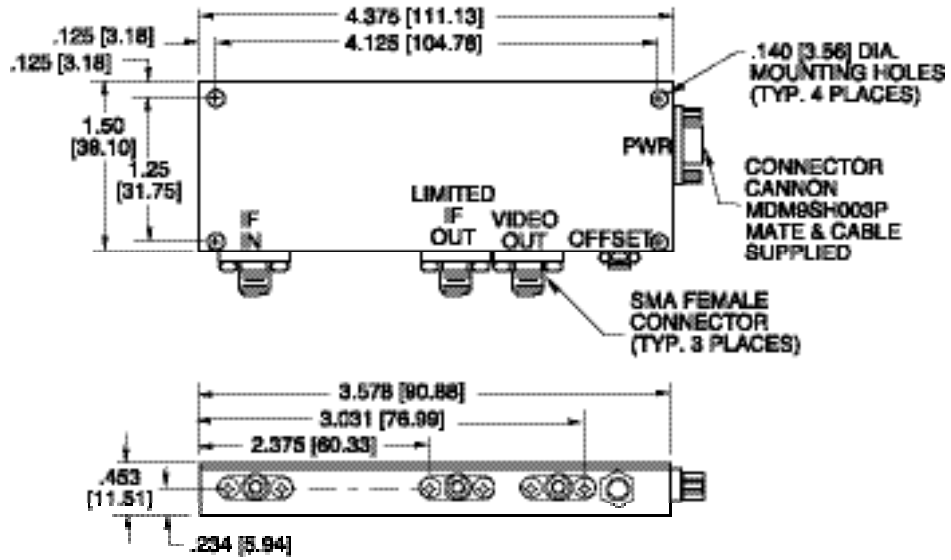
OUTLINE G*



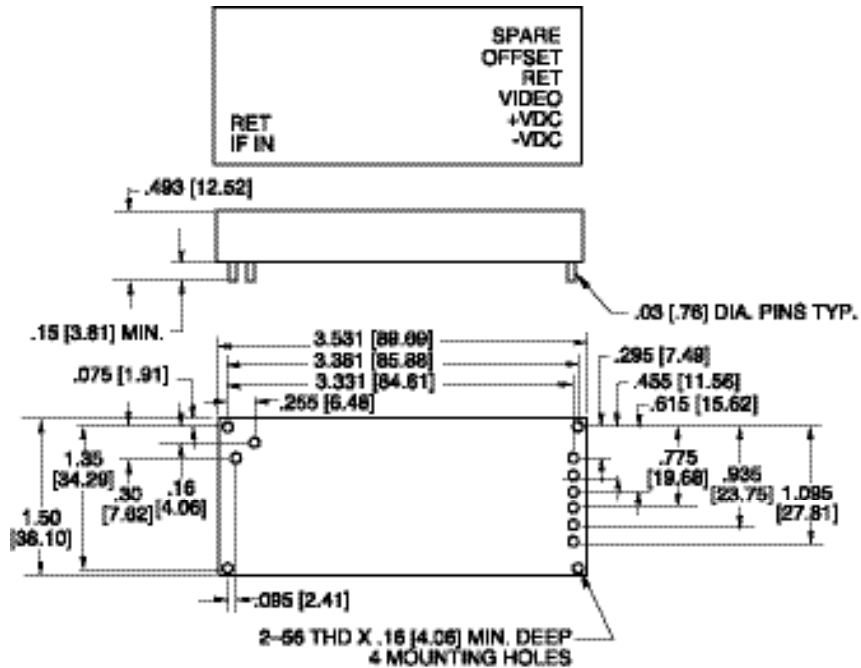
NOTE: DIMENSIONS SHOWN IN BRACKETS [] ARE IN MILLIMETERS.
 * ABOVE DRAWING INCLUDES LIMITED IF OUTPUT (OPTIONAL).

MLIF SERIES OUTLINE DRAWINGS

OUTLINE K*



OUTLINE M



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 * ABOVE DRAWING INCLUDES LIMITED IF OUTPUT (OPTIONAL).

