MULTIFUNCTION COMPONENTS

MODEL: LAFD SERIES

FEATURES

- Digital outputs for frequency discriminators and logarithmic amplifiers
- Broadband frequency range
- Pulse response to 5 ns
- 70 dB dynamic range at 1 GHz
- Improved sensitivity

OPTIONS

- Customized center frequencies
- Increased operational bandwidth
- Extended dynamic range
- Military screening available



MODEL Number	CENTER FREQUENCY (MHz)	3 dB BANDWIDTH (MHz)	LIMITED IF OUTPUT POWER VARIATION (±dB)	LOG AMP VIDEO RISE TIME (ns)	FREQUENCY DISCRIMINATOR LINEAR BANDWIDTH (MHz)	FREQUENCY Discriminator Rise Time (ns)	FREQUENCY DISCRIMINATOR SLOPE (mV/MHz)
LAFD-7-30/10	30	10	0.5	150	6	150	1000
LAFD-7-60/20	60	20	0.5	70	16	70	250
LAFD-7-70/30	70	30	0.5	50	20	50	150
LAFD-7-120/40	120	40	0.5	40	24	40	100
LAFD-7-160/50	160	50	1	30	30	30	100
LAFD-6-300/100	300	100	1	20	75	20	50
LAFD-6-750/200	750	200	1	15	150	15	20
LAFD-6-1000/300	1000	300	1	10	250	10	10

ADDITIONAL SPECIFICATIONS

Input dynamic range is -70 to 0 dBm minimum (30 MHz~160 MHz) and -65 to 0 dBm (300 MHz~1000 MHz).

Log linearity is $\leq \pm 1$ dB center frequency and 25°C.

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

Logging slope is 25 mV/dB typically measured at center frequency and 25°C.

Slope variation of ±10% can be expected over operating temperature of -40 to +85°C.

Limited IF output power is 10 dBm nominal at center frequency and 25°C.

Additional output power variation of ±1 dB will occur over operating temperature of -40 to +85°C.

Frequency discriminator linearity is $\leq \pm 3\%$ (30~70 MHz), $\leq \pm 5\%$ (120~160 MHz), and $\leq \pm 7\%$ (300~1000 MHz) over linear bandwidth.

Add ±2% over operating temperature of -40 to +85°C.

IF input/output impedance is 50 Ω (VSWR is < 2.0:1 typical).

Log and discriminator video output is DC coupled and rated into 93 Ω .

Power: ± 12 VDC at 500 mA typical.

ORDER OPTIONS

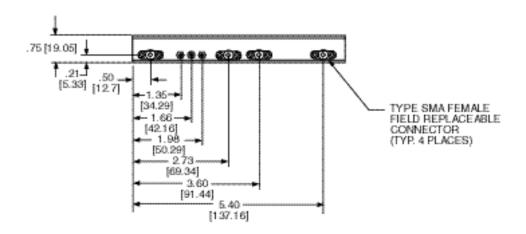
For ±15 VDC, add suffix "C".

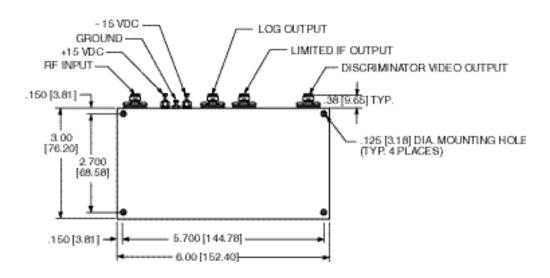
Typical part number: LAFD-7-160/50C (for ±15 VDC).

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



LAFD SERIES OUTLINE DRAWING





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

