DETECTOR LOG VIDEO AMPLIFIERS

MODEL: FBLA SERIES

FEATURES

- **Ultra-broadband units**
- **Logarithmic linearity ±1.5 dB max.**
- **Temperature range -20 to +90°C**
- **70 dB dynamic range**

OPTIONS

- **Customized center frequencies and frequency agility**
- **Extended environmental limits**
- **Military screening available**

MODEL NUMBER	OPERATIONAL FREQUENCY RANGE (GHz)	INPUT DYNAMIC RANGE (dBm)	TANGENTIAL SENSITIVITY (dBm)	VIDEO FLATNESS (±dB)	RISE TIME (ns)	FALL TIME (ns)	RECOVERY TIME (ns)
STANDARD DYNAMIC RANGE							
FBLA-0.5/2.0-40AC	0.5 – 2	-40 to 0	-44	0.5	30	45	150
FBLA-2/4-40AC	2 – 4	-40 to 0	-44	0.5	30	45	150
FBLA-4/8-40AC	4 – 8	-40 to 0	-43	0.75	35	50	180
FBLA-8/12-40AC	8 – 12	-40 to 0	-43	1	35	50	180
EXTENDED DYNAMIC RANGE							
FBLA-0.1/1-70BC	0.1 – 1	-67 to +3	-70	1.5	40	120	350
FBLA-0.5/1.5-70BC	0.5 – 1.5	-67 to +3	-70	1.5	40	120	350
FBLA-1/2-70BC	1 – 2	-65 to +5	-68	1.5	40	120	350

ADDITIONAL SPECIFICATIONS

For standard and extended dynamic range DLVAs, 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.
Logging slope for standard dynamic range DLVA is 100 mV/dB at center frequency and 25°C.
Logging slope for extended dynamic range DLVA is 15 mV/dB at center frequency and 25°C.
Slope variations of ±5% variation will occur over operating bandwidth.
An additional ±5% will occur over operating temperature of -40 to +85°C
Video output is DC coupled and rated into 93 Ω.
DC offset drift is ±50 mV typical over operating temperature of -40 to +85°C.
Input VSWR < 2.0:1 typical from 0.1 to 4 GHz and < 2.5:1 from 4 to 12 GHz.
Power: ±12 VDC at 100 mA typical for standard dynamic range and 200 mA typical for extended dynamic range.

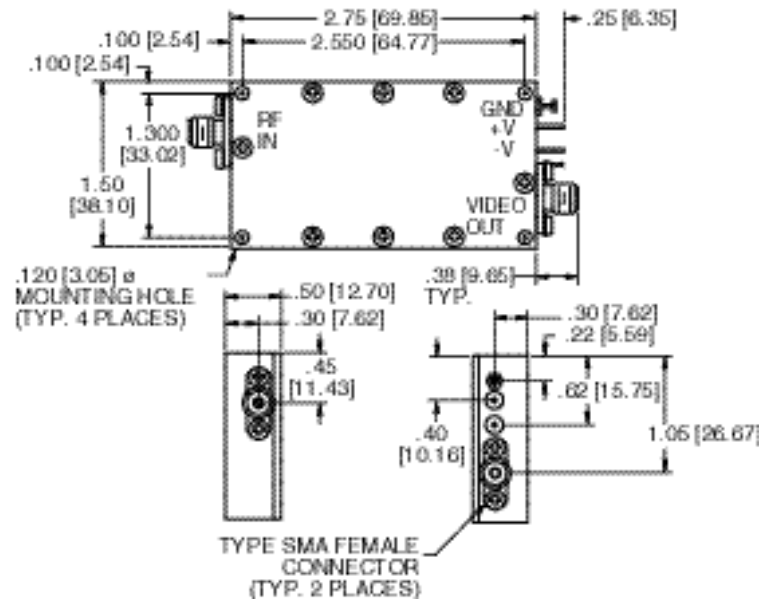### ORDER OPTIONS

For ±15 VDC, add suffix "C".
Typical part number: FBLA-0.1/1.0-70BC (for 'B' housing at ±15 VDC).

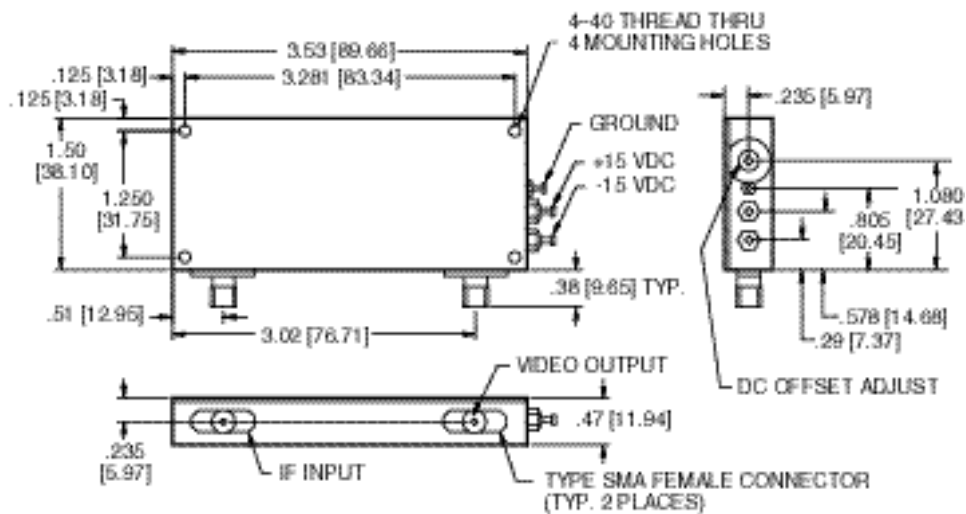NOTE: FOR MODIFICATION OF OUR STANDARD MODELS, PLEASE CONSULT FACTORY.

FBLA SERIES OUTLINE DRAWINGS

OUTLINE A

TYPE SMA FEMALE
CONNECTOR
(TYP. 2 PLACES)

OUTLINE B

TYPE SMA FEMALE CONNECTOR
(TYP. 2 PLACES)

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