



LOW NOISE, HIGH GAIN, GaAs FET PHOTODETECTOR-AMPLIFIER MODULE

- Ultra Low Noise - down to 15 fW/√Hz
- High Bandwidth – up to 60 MHz
- AC or DC Coupled Output
- High Gain – 1 MV/A Transimpedance
- Silicon or InGaAs PIN's & APD's
- Directive 2011/65/EU (RoHS II) Compliant



DESCRIPTION:

The **712B Series** Low Noise, High Bandwidth Photodetector-Amplifier Modules offer high gain amplifiers with the flexibility of incorporating various silicon and InGaAs photodetectors for low signal level sensing applications. The **712B Series** is based on the **312B Series** transimpedance amplifiers. Consult factory for different detectors.

SPECIFICATIONS:

Input	Silicon or InGaAs photodetector (See table for characteristics.) 3 μ A maximum DC light-induced current		Positive output when flux applied
Output		Power	+12 to +15 VDC at 80 mA typical
Load	50 Ω	Temperature	-20° to +70°C
Swing	> +3 V pk	Connections	
Coupling	AC (add -AC to part number) DC (add -DC to part number) AC cut-out frequency of $\leq$ 250 Hz	Input	Photodetector
Gain	1 MV/A transimpedance Multiply transimpedance gain by detector responsivity at peak wavelength to get V/W in table.	Output	SMB (SMB to BNC cable provided)
Polarity	Non-Inverting	Power	Solder Pins
		Bias	9 V internal bias may be over-ridden by external supply. External Bias Pin decoupled with 0.01 μ F, 1 kV capacitor
		Size	1.98" x 3.2" x 0.5"
		Weight	4 ounces
		MTBF	> 1x10 ⁷ hrs

Specifications subject to change without notice.



APPLICATIONS:

High Speed, Low Light Level Sensing, LIDAR

