Non-Cooled - Large Area APD Modules

Electro-Optical Characteristics

Part Number	Active Diameter (mm)	Spectral Enhancement	Sensitivity @ 1 MHz Typical‡		NEP @ 1 MHz Typical‡		Frequency		
			-610 (10^5V/W)	-611 (10^5V/W)	-610 (FW/√HZ)	-611 (FW/√HZ)	Low Cutoff Typical (Hz)	High Cutoff Typ (MHz)	High Cutoff Min (MHz)
118-70-75-610	3	DUV	1.6	n/a	55	n/a	2000	14	10
118-70-73-61X†		UV	2.1	1.9	54	58			
118-70-74-61X†		Blue	3.9	3.6	29	31			
118-70-72-61X†		Red/IR	5.5	5.1	21	22			
197-70-75-610	5	DUV	1.6	n/a	75	n/a		14	10
197-70-73-61X†		UV	2.1	1.9	54	58			
197-70-74-61X†		Blue	3.9	3.6	29	31			
197-70-72-61X†		Red/IR	5.5	5.1	21	22			
394-70-75-610	10	DUV	1.6	n/a	85	n/a		12	10
394-70-73-61X†		UV	2.1	1.9	64	69			
394-70-74-61X†		Blue	3.9	3.6	35	37			
394-70-72-61X†		Red/IR	5.5	5.1	24	26			
630-70-75-610	16	DUV	1.6	n/a	160	n/a		10	8
630-70-73-61X†		UV	2.1	1.9	120	130			
630-70-74-61X†		Blue	3.9	3.6	66	71			
630-70-72-61X†		Red/IR	5.5	5.1	47	50			

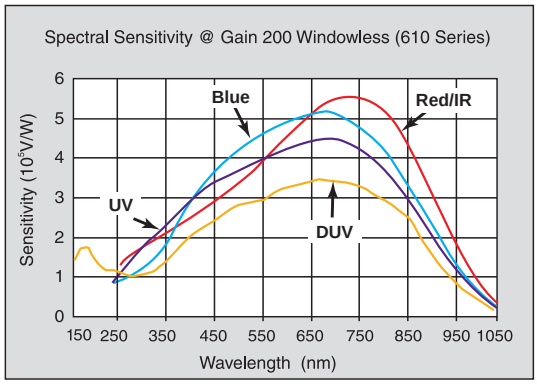
† Substitute a "0" for windowless, or a "1" for a windowed device for the X designator in the part number.
‡ Sensitivity and NEP for DUV, UV, Blue, and Red/IR specified at the following light wavelengths of 160nm, 350nm, 500nm, and 750nm, respectively.
◊ Operating beyond these limits may cause permanent damage to the device.

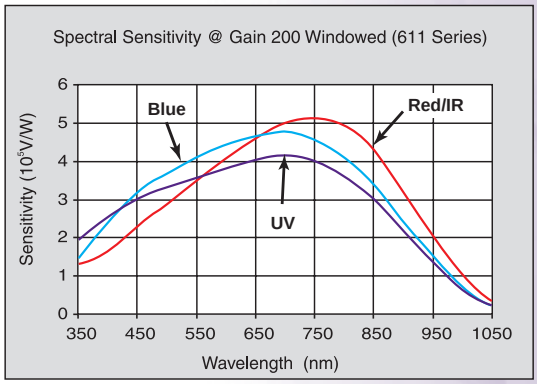
Feedback Resistance (kΩ)	10 ± 1%	
Output Impedence (Ω)	40	
Linear Output Swing (V)	+1	
Output Stability Typical (%/°C)	±1.2	
Current Consumption of Supply	Typ (mA)	Max (mA)
-12V	20	50
+12V	150	250

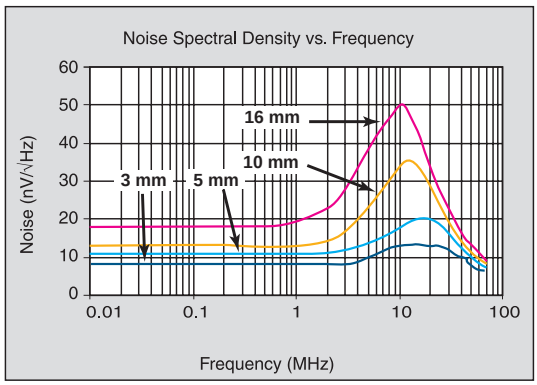
Absolute Maximum Ratings◊

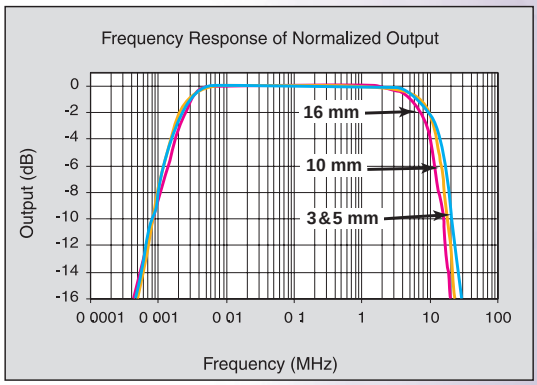
Gain, 23°C @ λ=675nm	250
Operating Temp Range (°C)	0 to +40
Storage Temp Range (°C)	-40 to +70
Continuous Incident Light Intensity (μW) **Gain=200 @ λ=675nm**	3mm - 0.6 5mm - 1.0 10mm - 2.0 16mm - 3.0
Supply Voltage (V)	±13

Typical Performance Graphs







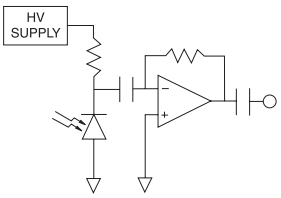
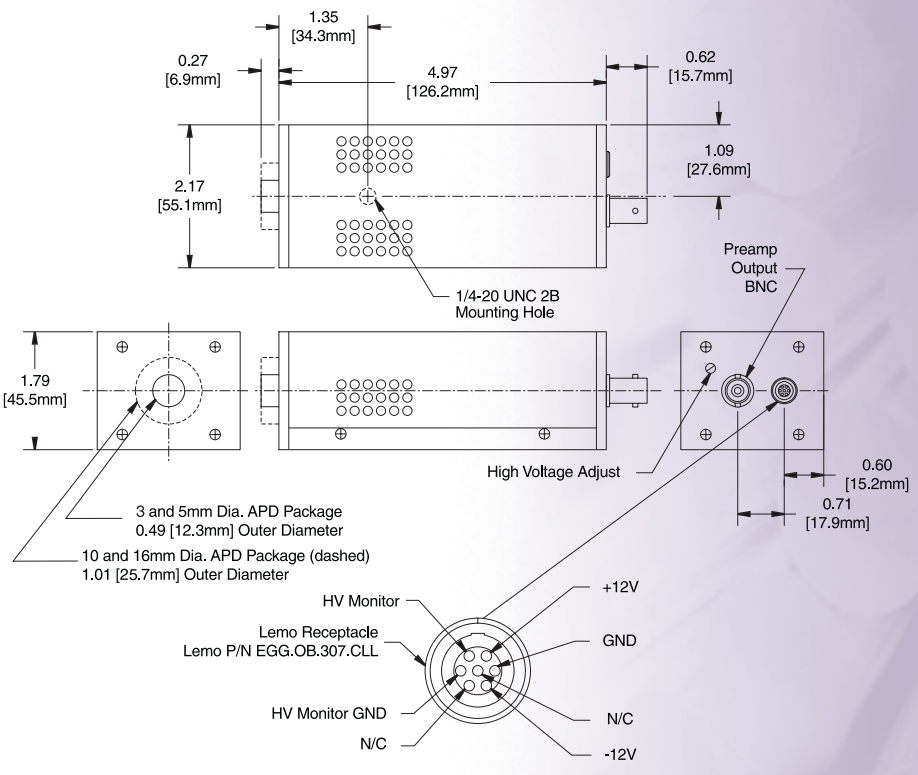


Mechanical Dimensions

Cable Assembly (included)

API P/N 129-10-611

Cable assembly has a 3.0 foot cable connected to a mating Lemo connector.

Cable Assembly Wiring Table

Wire Color	Item
Red	+12V
Green	GND
Black	-12V
Red/Black	HV Monitor
White/Black	HV Monitor GND
Orange	N/C
Blue	N/C
White	N/C