



Non-Cooled - Large Area APD Modules

Electro-Optical Characteristics

Part Number	Active Diameter (mm)	Spectral Enhancement	Sensitivity @ 1 MHz		NEP		Frequency				
			Typical [‡] (10 ³ V/W)		Typical [‡] (pW/√Hz)		Low Cutoff	High Cutoff			
			-610	-611	-610	-611	Typical (Hz)	Typ (MHz)	Min (MHz)		
118-70-75-610	3	DUV	1.6	n/a	0.15	n/a	2000	14	10		
118-70-73-61X [†]		UV	2.1	1.9	0.12	0.13					
118-70-74-61X [†]		Blue	3.9	3.6	0.065	0.07					
118-70-72-61X [†]		Red/IR	5.5	5.1	0.045	0.05					
197-70-75-610	5	DUV	1.6	n/a	0.22	n/a		2000	14	10	
197-70-73-61X [†]		UV	2.1	1.9	0.16	0.18					
197-70-74-61X [†]		Blue	3.9	3.6	0.085	0.095					
197-70-72-61X [†]		Red/IR	5.5	5.1	0.06	0.065					
394-70-75-610	10	DUV	1.6	n/a	0.4	n/a			2000	12	10
394-70-73-61X [†]		UV	2.1	1.9	0.3	0.33					
394-70-74-61X [†]		Blue	3.9	3.6	0.17	0.18					
394-70-72-61X [†]		Red/IR	5.5	5.1	0.12	0.13					
630-70-75-610	16	DUV	1.6	n/a	1.0	n/a	2000	10	8		
630-70-73-61X [†]		UV	2.1	1.9	0.8	0.88					
630-70-74-61X [†]		Blue	3.9	3.6	0.43	0.46					
630-70-72-61X [†]		Red/IR	5.5	5.1	0.3	0.33					

[†] 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.

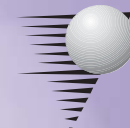
[◇] Operating beyond these limits may cause permanent damage to the device.

Absolute Maximum Ratings[◇]

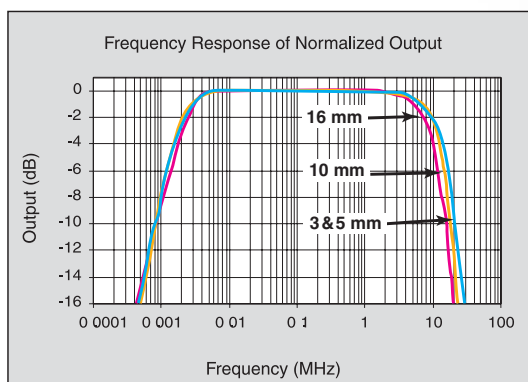
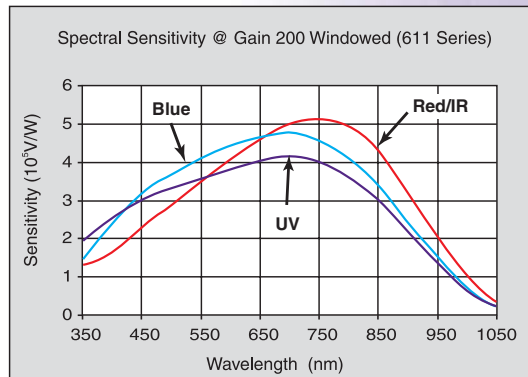
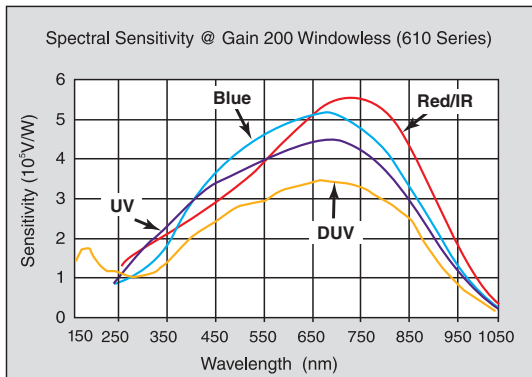
Feedback Resistance (kΩ)	10 ± 1%		
Output Impedance (Ω)	40		
Linear Output Swing (V)	+1		
Output Stability Typical (%/°C)	±1.2		
Current Consumption of Supply	Typ (mA)	Max (mA)	
	-12V	20	50
	+12V	150	250

Gain, 23°C @ λ=675nm	250
Operating Temp Range (°C)	0 to +40
Storage Temp Range (°C)	-20 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

