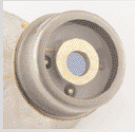




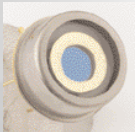
# Windowed - Large Area APDs

## Electro-Optical Characteristics

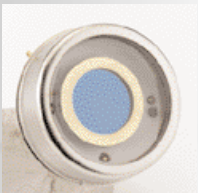
All specifications apply when APD is operated at 23°C and at a gain of 200.



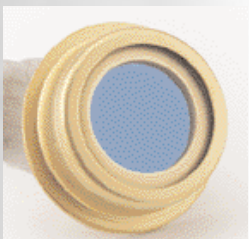
3 mm



5 mm



10 mm



16 mm

Active Diameter	Bias Voltage Range†	Temperature Coefficient of Breakdown Voltage	Capacitance f = 100kHz	Dark Current		Noise Current Spectral Density f = 10kHz		Rise Time λ = 675nm Load = 50Ω	
(mm)	(V)	(%/°C)	Typ (pF)	Typ (nA)	Max (nA)	Typ (pA/√Hz)	Max (pA/√Hz)	Typ (ns)	Max (ns)
3	1700 to 2000	+0.1	15	20	60	0.7	1.4	8	12
5			25	35	100	1.0	2.0	10	15
10			65	90	230	1.5	3.0	12	18
16			130	280	600	2.5	5.5	15	22

## Absolute Maximum Ratings◇

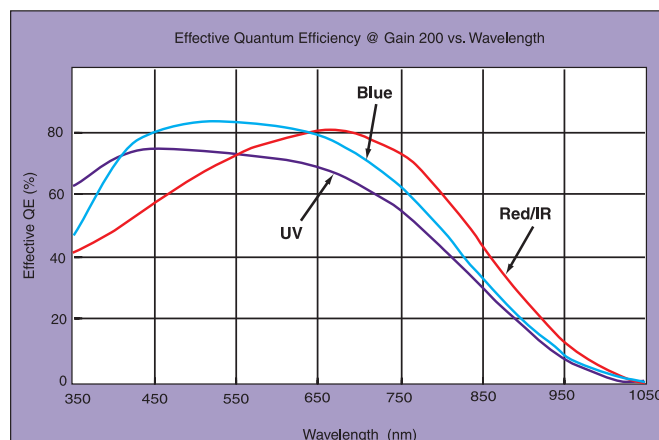
Part Number	Active Area Diameter (mm)	Spectral Enhancement	Responsivity Typical (A/W)
118-70-73-581	3	UV	35 @ 350nm
118-70-74-581		Blue	65 @ 500nm
118-70-72-581		Red/IR	93 @ 750nm
197-70-73-581	5	UV	35 @ 350nm
197-70-74-581		Blue	65 @ 500nm
197-70-72-581		Red/IR	93 @ 750nm
394-70-73-581	10	UV	35 @ 350nm
394-70-74-581		Blue	65 @ 500nm
394-70-72-581		Red/IR	93 @ 750nm
630-70-73-5X1‡	16	UV	35 @ 350nm
630-70-74-5X1‡		Blue	65 @ 500nm
630-70-72-5X1‡		Red/IR	93 @ 750nm

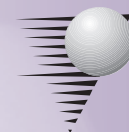
Gain, M @ λ=675nm	250
Operating Temp Range (°C)	-55 to +40
Storage Temp Range (°C)	-55 to +70
Power Dissipation @23°C (W)	3mm - 0.12 5mm - 0.2 10mm - 0.4 16mm - 0.6

† Positive high voltage (HV) is applied to the cathode contact. The maximum value for the operating HV is specified with each device.

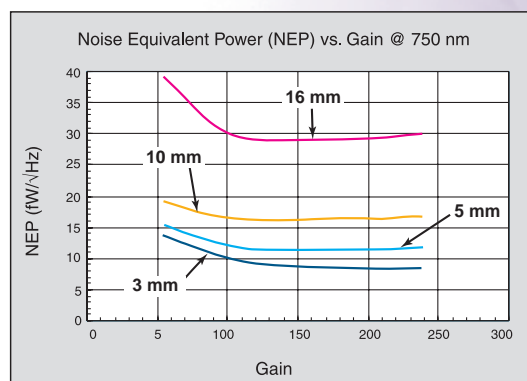
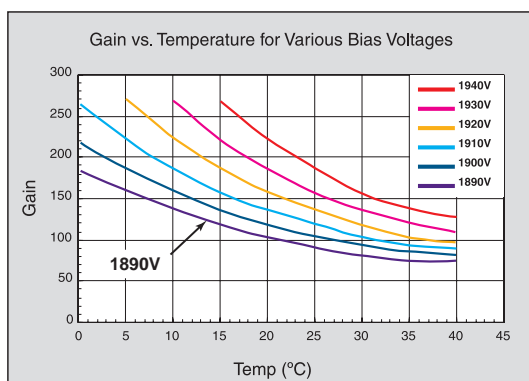
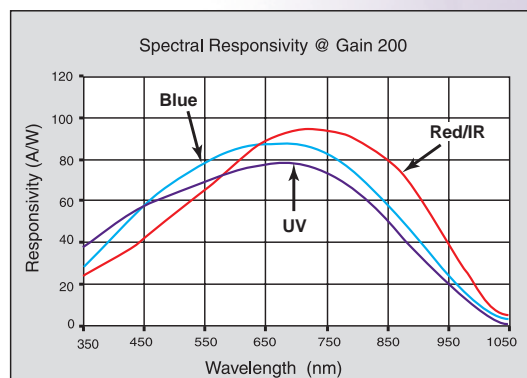
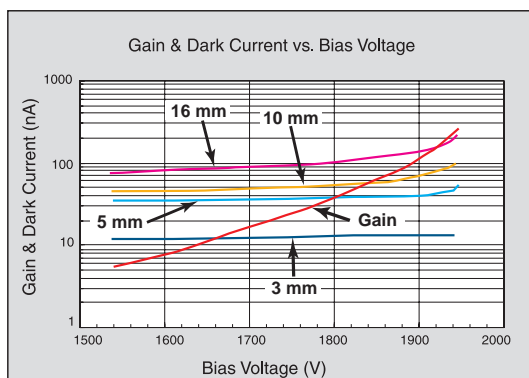
‡ "X" indicates package style; "0" = SHV connector (supplied with mating connector) and "1" = a single pin connection.

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





# Typical Performance Graphs



## Mechanical Dimensions

