



High Speed Small Area APDs

Electro-Optical Characteristics

All specifications apply when APD is operated at 23°C and at a gain of 100 @ $\lambda = 830\text{nm}$.



.3 mm



.5 mm



.9 mm



1.5 mm



3 mm

Part Number	Package	Active Area Dia. (mm)	Responsivity (A/W)			Dark Current (nA)	
			532 nm	660 nm	830 nm	(Typ)	(Max)
			(Typ)	(Typ)	(Typ)		
012-70-62-541	TO-46	0.3	15	35	45	2	10
020-70-62-541	TO-46	0.5				3	15
036-70-62-531	TO-5	0.9				7	30
060-70-62-541	TO-39	1.5	10	22	30	10	50
120-70-62-541*	TO-39	3				25	100

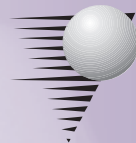
Capacitance (pF)	Noise Current Spectral Density (pA/Hz ^{1/2})	Noise Equivalent Power @ 830 nm (fW/Hz ^{1/2})	Rise Time (ns)	Bias Voltage Range (V)
(Max)	(Typ)	(Typ)		
2.5	0.12	2.5	1	130-280
5	0.25	5	1	
10	0.4	8	2	
20	0.7	14	3	
50	0.6	20	4.5	

Absolute Maximum Ratings[◇]

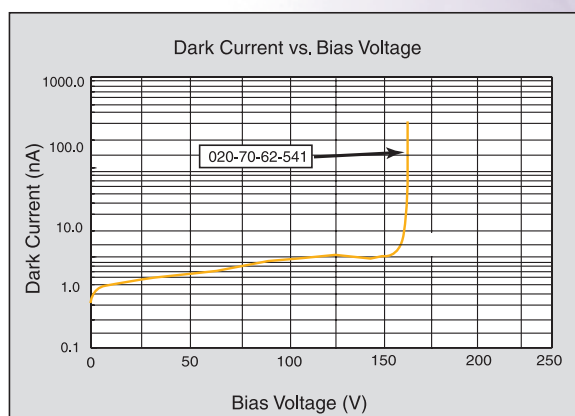
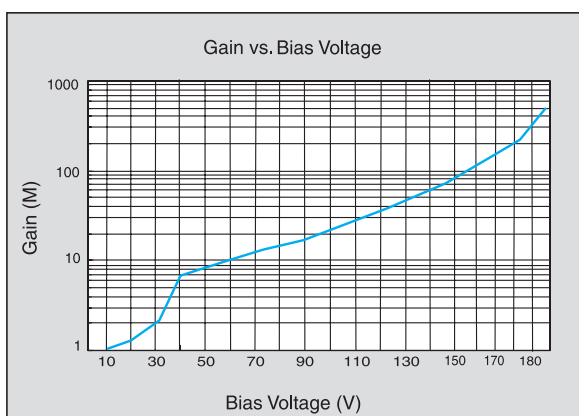
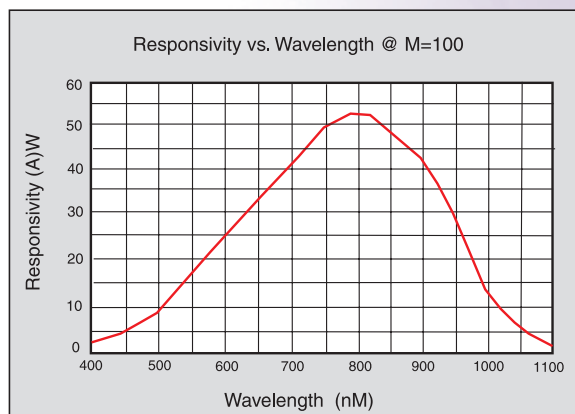
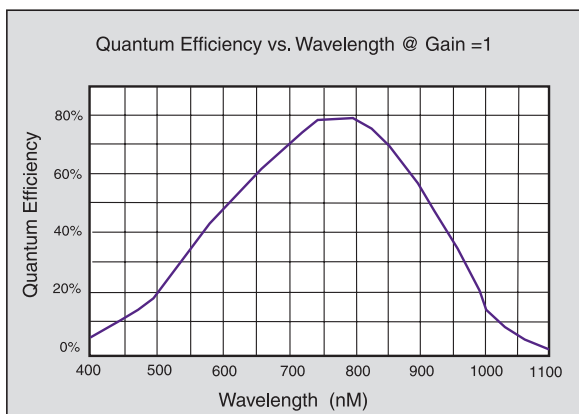
Operating Temp Range (°C)	-40 to +55°C
Storage Temp Range (°C)	-40 to +85°C
Power Dissipation @ 23°C (mW)	.3mm
	.5mm } 20
	.9mm
	1.5mm } 40
	3.0mm

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

* Test conditions: Gain of 60 @ 830nm.



Typical Performance Graphs



Mechanical Dimensions

