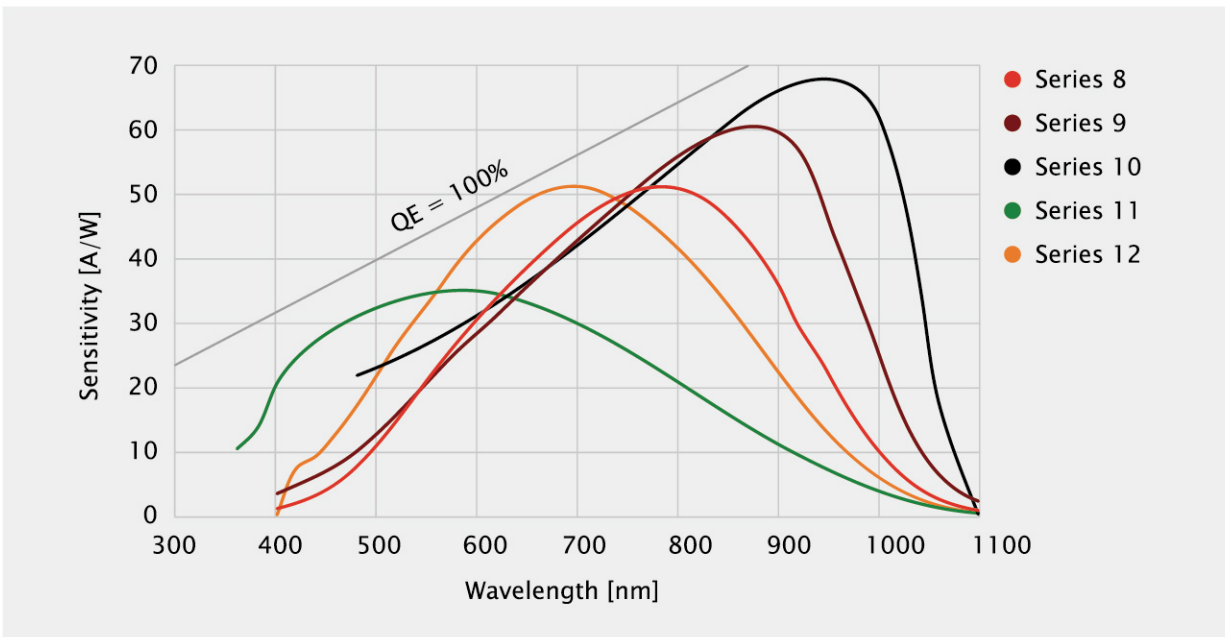


新势力光电供应雪崩二极管(APD), 是一种内部增益机制的光电二极管。雪崩二极管主要用于微弱信号检测, 以及需要快速响应的场合。新势力光电提供APD雪崩二极管阵列和雪崩二极管模块。

技术特点: 响应速度快、暗电流低、串扰低、反射低、寿命长、紫外增强、蓝光增强、红外增强。

产品应用: 安检设备、激光测距、工业控制、分析仪器、生物医疗、光通信、军事设备、航空航天。

PIN Series	Special features for Applications
Series-11 Optimized for 360-560nm	Blue enhanced for analytical instruments, readout for scintillators.
Series-12 Optimized for 500-750nm	Flat frequency response up to 3GHz for precise distance meas., communication.
Series-8 Optimized for 750-820nm	High-speed for resistance meas., laser scanner, high speed applications.
Series-9 Optimized for 750-930nm	Low rise time for laser rangefinder, LIDAR, basic technology for arrays.
Series-10 Optimized for 860-1100nm	Sensitivity at 1064nm for range finder, laser tracker, LIDAR.



APD雪崩二极管响应曲线图

激光器

光学测量

光学元件

太赫兹系统

▶ 光电探测器

单光子计数器

光学滤光片

可饱和吸收镜

光源

光纤

- 激光器
- 光学测量
- 光学元件
- 太赫兹系统

光电探测器 ◀

单光子
计数器

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可饱和
吸收镜

光源

光纤

Series 11: Blue sensitivity enhanced (for biomedical applications)					
Type No.		Active area		Dark current	Rise time
Chip	Package	Size	Area	M=100	410nm 50Ω
		mm	mm ²	nA	ns
AD800-11	TO52S1	∅0.8	0.5	1	1
AD1900-11	TO5i	∅1.95	3	5	2
Series 12: Red sensitivity enhanced (cut-off frequency up to 3 GHz)					
Type No.		Active area		Spectral Responsivity	Cut-off frequency
Chip	Package	Size	Area	660nm M=100	660nm 50Ω
		mm	mm ²	A/W	GHz
AD100-12	LCC6.1	∅0.1	0.008	50	typ. 3, min. 2
AD100-12	LCC6.1f	∅0.1	0.008	44	typ. 3, min. 2
AD100-12	TO52S1	∅0.1	0.008	50	typ. 3, min. 2
AD230-12	LCC6.1	∅0.23	0.042	50	typ. 3, min. 2
AD230-12	LCC6.1f	∅0.23	0.042	44	typ. 3, min. 2
AD230-12	TO52S1	∅0.23	0.042	50	typ. 3, min. 2
AD500-12	LCC6.1	∅0.5	0.196	50	typ. 3, min. 2
AD500-12	LCC6.1f	∅0.5	0.196	44	typ. 3, min. 2
AD500-12	TO52S1	∅0.5	0.196	50	typ. 3, min. 2
Series 8: Optimized for high cut-off frequencies-850 nm (optimized for high speeds)					
Type No.		Active area		Dark current	Rise time
Chip	Package	Size	Area	M=100	M=100 20V 50Ω
		mm	mm ²	nA	ns
AD100-8	LCC6.1	∅0.1	0.008	0.05	<0.18
AD100-8	LCC6.1f	∅0.1	0.008	0.05	<0.18
AD100-8	TO52S1	∅0.1	0.008	0.05	<0.18
AD100-8	TO52S3	∅0.1	0.008	0.05	<0.18
AD230-8	LCC6.1	∅0.23	0.04	0.3	0.18
AD230-8	LCC6.1f	∅0.23	0.04	0.3	0.18
AD230-8	TO52S1	∅0.23	0.04	0.3	0.18
AD230-8	TO52S3	∅0.23	0.04	0.3	0.18
AD500-8	LCC6.1	∅0.5	0.2	0.5	0.35
AD500-8	LCC6.1f	∅0.5	0.2	0.5	0.35
AD500-8	TO52S1	∅0.5	0.2	0.5	0.35
AD500-8	TO52S2	∅0.5	0.2	0.5	0.35
AD500-8	TO52S3	∅0.5	0.2	0.5	0.35
AD800-8	TO52S1	∅0.8	0.5	2	0.7
AD1100-8	TO52S1	∅1.13	1	4-6	1
AD1900-8	TO5i	∅1.95	3	15	1.4
AD3000-8	TO5i	∅3	7.07	30	2
AD5000-8	TO8i	∅5	19.63	60	3
AD230-8-2.3G	TO5	AD230-8-2.3G TO5 is a high frequency optical data receiver comprising an Avalanche Silicon Photodiode and a transimpedance amplifier in a hermetically sealed TO5 package.			
AD500-8-1.3G	TO5	AD500-8-1.3G TO5 is a high frequency optical data receiver comprising an Avalanche Silicon Photodiode and a transimpedance amplifier in a hermetically sealed TO5 package.			

Series 9: NIR sensitivity enhanced-900nm (specifically for LIDAR and laser rangefinders)					
Type No.		Active area		Dark current	Rise time
Chip	Package	Size	Area	M=100	M=100
		mm	mm ²	nA	ns
AD230-9	LCC6.1	∅0.23	0.04	0.5	0.5
AD230-9	LCC6.1f	∅0.23	0.04	0.5	0.5
AD230-9	TO52S1	∅0.23	0.04	0.5	0.5
AD230-9	TO52S1F2	∅0.23	0.04	0.5	0.5
AD230-9	TO52S3	∅0.23	0.04	0.5	0.5
AD500-9	LCC6.1	∅0.5	0.2	0.8	0.55
AD500-9	LCC6.1f	∅0.5	0.2	0.8	0.55
AD500-9	TO52S1	∅0.5	0.2	0.8	0.55
AD500-9	TO52S1F2	∅0.5	0.2	0.8	0.55
AD500-9	TO52S2	∅0.5	0.2	0.8	0.55
AD500-9	TO52S3	∅0.5	0.2	0.8	0.55
AD800-9	TO52S1	∅0.8	0.5	2	0.9
AD1100-9	TO52S1	∅1.13	1	4	1.3
AD1500-9	TO5i	∅1.5	1.77	2	2
AD3000-9	TO5i	∅3	7.07	30	2
AD5000-9	TO8i	∅5	19.63	60	3
AD230-9-400M	TO5	AD230-9-400M-TO5 is a high frequency optical data receiver comprising an Avalanche Silicon Photodiode and a transimpedance amplifier in a hermetically sealed TO-5 package.			
AD500-9-400M	TO5	AD500-9-400M-TO5 is a high frequency optical data receiver comprising an Avalanche Silicon Photodiode and a transimpedance amplifier in a hermetically sealed TO-5 package.			
Multi-Element Array					
8AA0.4-9	SOJ22GL	APD Array 8 Elements, QE>80% at 760-910nm with NTC			
16AA0.13-9	SOJ22GL	APD Array 16 Elements, QE>80% at 760-910nm with NTC			
16AA0.13-9	DIL18	APD Array 16 Elements, QE>80% at 760-910nm			
16AA0.4-9	SOJ22GL	APD Array 16 Elements, QE>80% at 760-910nm			
25AA0.04-9	BGA	APD Array 25 (5×5) elements, QE>80% at 760-910nm with PTC			
25AA0.16-9	BGA	APD Array 25 (5×5) elements, QE>80% at 760-910nm with PTC			
64AA0.04-9	BGA	APD Array 64 (8×8) elements, QE>80% at 760-910nm with PTC			
Series 10: NIR sensitivity enhanced - 1064nm (specifically for laser rangefinders, targeting systems or any applications using YAG lasers or similar NIR radiation sources)					
Type No.		Active area		Dark current	Rise time
Chip	Package	Size	Area	M=100	M=100 1064nm 50Ω
		mm	mm ²	nA	ns
AD500-10	TO5i	∅0.5	0.2	1.5	4
AD800-10	TO5i	∅0.8	0.5	3	5
AD1500-10	TO5i	∅1.5	1.77	7	5
AD4000-10	TO8Si	∅4	12.56	50	6
AD800-10	TO8Si	High speed, high gain, low noise, low power consumption hybrid (AD800-10+TIA)			
Multi-Element Array					
QA4000-10	TO8Si	Quadrant Avalanche Photodiode, High QE at 850-1070nm			

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