

AVALANCHE PHOTODIODES

Si-EPI-APDs

part number	diameter µm	wavelength range nm	peak sensitivity nm	responsivity@ λ peak A/W	package	Vbr Volt	Vbr TC V/°C	Id nA	Noise pA/sqrtHz	capacitance pF	rise time ps	specifications (@ M=100 , peak sensitivity)											
SAE230Nx	230	550-1050	905	50	S2, S3, M8, F3	150 - 300	0.6	1	0.2	1	500												
SAE500Nx	500	550-1050	905	50	S2, S3, M8, L3, F3	150 - 300	0.6	1.5	0.2	2	500												
SAE500Vx	500	400-1000	650	38	S2, S3, L3, M8	150 - 300	0.2	10	0.6	4	450												

Si-REACH THROUGH APDs

part number	diameter µm	wavelength range nm	peak sensitivity nm	responsivity@ λ peak A/W	package	Vbr Volt	Vbr TC V/°C	Id nA	Noise pA/sqrtHz	capacitance pF	rise time ps	specifications (@ M=100 , peak sensitivity)											
SAR500x	500	400-1100	905	60	S2, S3, F3	170 - 350	1	1.5	< 1	1.5	450												
SARP500x	500	400-1100	905	60	S2, S3	170 - 350	1	0.5	< 0.2	1.5	450												
SARP500T6	500	400-1100	905	60	T6 (TEC)	170 - 350	1	0.5		1.5	450												
SARF500F2*	500	880-930	905	10	F2	typ. 400	2.5	1	0.05	1	3000												
SAR1500x	1500	400-1100	905	60	G1, T6	typ. 300	2	0.75	typ. 0.3	4	500												
SAR3000x	3000	400-1100	905	60	E1, T6	typ. 300	2	1	typ. 0.5	7	500												
SAT3000x	3000	700-1100	980	34**	E1, T6	typ. 400	2.5	1	typ. 0.5	10	3000												

*specifications @ M=18, 905 nm

**@ 1060 nm

InGaAs-APDs

part number	diameter µm	wavelength range nm	peak sensitivity nm	responsivity@ λ peak A/W	package	Vbr Volt	Vbr TC V/°C	Id nA	Noise pA/sqrtHz	capacitance pF	rise time ps	specifications (@ M=10 , peak sensitivity)											
IAE080x	80	1000-1650	1550	10	S5, S6, S7, Y	40 - 65	0.1	12	< 0.4	1	350												
IAE200x	200	1000-1650	1550	10	S5, S6, S7, Y	40 - 65	0.1	40	< 0.8	2.5	700												

	Absolute Maximum Ratings for Si-APDs			
	min	typ	max	units
Storage Temperature	-55		100	°C
Operating Temperature	-30		75	°C
Reverse Current (cw)			200	µA
Reverse Current (1sec)			1	mA
Forward Current (cw)			5	mA
Forward Current (1sec)			50	mA
Max. Power Dissipation			60	mW
Soldering (for 5 sec)			200	°C

	Absolute Maximum Ratings for InGaAs-APDs			
	min	typ	max	units
Storage Temperature	-40		85	°C
Operating Temperature	-40		75	°C
Reverse Current (cw)			100	µA
Reverse Current (1sec)			1,6	mA
Forward Current (cw)			5	mA
Forward Current (1sec)			10	mA
Soldering (for 5 sec)			200	°C



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