

VIS-NIR PHOTODIODE COMPONENTS

EOS offers a line of Silicon, Germanium, Indium Gallium Arsenide, and Indium Gallium Arsenide Antimonide photodiodes for use in the 0.3 μm to 2.4 μm spectrum. Diodes operating at room temperature or TE cooled are offered in a variety of standard TO packages. Dewar packages for use with liquid nitrogen are also available. Custom packages are available for all detectors.

Material	Part Number	†Active Dia. (mm)	Operating Wavelength (μm)	Operating Temp (K)	Responsivity at λ_p (A/W) (min)	Shunt Resistance (Ω) (min)	Shunt Capacitance (pF) (typ)	NEP at λ_p , 100Hz (W/Hz ^{1/2})	*Package
Si	S-010	1.0	0.3 – 1.0	295	0.55 @ .85 μm	> 1000 M	25	<10 ⁻¹⁴	TO-18
	S-010/TE2	1.0	0.3 – 1.0	243		> 1000 M	25	<10 ⁻¹⁴	TO-8
	S-025	2.5	0.3 – 1.0	295		100 M	400	1.5x10 ⁻¹⁴	TO-5
	S-025/TE2	2.5	0.3 – 1.0	243		> 1000 M	400	<10 ⁻¹⁴	TO-8
	S-050	5.0	0.3 – 1.0	295		50 M	1500	3.0x10 ⁻¹⁴	TO-8
	S-050/TE2	5.0	0.3 – 1.0	243		> 1000 M	1500	<10 ⁻¹⁴	TO-8
	S-025UV	2.5	0.2 – 1.0	295	0.50 @ .70 μm	100 M	300	2.5x10 ⁻¹⁴	TO-5
	S-025UV/TE2	2.5	0.2 – 1.0	243		> 1000 M	300	<10 ⁻¹⁴	TO-8
	S-050UV	5.0	0.2 – 1.0	295		50 M	1000	3.0x10 ⁻¹⁴	TO-8
	S-050UV/TE2	5.0	0.2 – 1.0	243		> 1000 M	1000	<10 ⁻¹⁴	TO-5
Ge	G-010	1.0	0.8 – 1.8	295	0.80 @ 1.5 μm	200 k	1500	3.0x10 ⁻¹³	TO-18
	G-010/TE2	1.0	0.8 – 1.7	243		100 M	1500	1.5x10 ⁻¹⁴	TO-8
	G-020	2.0	0.8 – 1.8	295		90 k	9000	4.5x10 ⁻¹³	TO-5
	G-020/TE2	2.0	0.8 – 1.7	243		50 M	9000	2.0x10 ⁻¹⁴	TO-8
	G-030	3.0	0.8 – 1.8	295		40 k	13000	7.0x10 ⁻¹³	TO-5
	G-030/TE2	3.0	0.8 – 1.7	243		10 M	13000	4.0x10 ⁻¹⁴	TO-8
	G-050	5.0	0.8 – 1.8	295		15 k	30000	1.5x10 ⁻¹²	TO-8
	G-050/TE2	5.0	0.8 – 1.7	243		5 M	30000	6.0x10 ⁻¹⁴	TO-8
	G-100	10.0	0.8 – 1.8	295		2 k	30000	3.0x10 ⁻¹²	TO-9
	G-100/TE2	10.0	0.8 – 1.7	243		50 k	30000	6.0x10 ⁻¹²	T-5
InGaAs	IGA-003	0.3	1.0 – 1.7	295	0.90 @ 1.3 μm	500 M	5	<10 ⁻¹⁴	TO-18
	IGA-003/TE2	0.3	1.0 – 1.6	243		>1000 M	5	<10 ⁻¹⁴	TO-8
	IGA-010	1.0	1.0 – 1.7	295		100 M	100	1.5x10 ⁻¹⁴	TO-18
	IGA-010/TE2	1.0	1.0 – 1.6	243		>1000 M	100	<10 ⁻¹⁴	TO-8
	IGA-020	2.0	1.0 – 1.7	295		4 M	400	7.0x10 ⁻¹⁴	TO-5
	IGA-020/TE2	2.0	1.0 – 1.6	243		200 M	400	<10 ⁻¹⁴	TO-8
	IGA-030	3.0	1.0 – 1.7	295		1 M	900	1.5x10 ⁻¹³	TO-5
	IGA-030/TE2	3.0	1.0 – 1.6	243		20 M	900	3.0x10 ⁻¹⁴	TO-8
InGaAsSb	IGA2.2-010	1.0	1.3 – 2.4	295	1.0 @ 2.2 μm	1 k	300	5.0x10 ⁻¹²	TO-5
	IGA2.2-010/TE2	1.0	1.3 – 2.4	243		15 k	300	1.5x10 ⁻¹²	TO-8

* Listed is standard package. Other packages are available; Please consult factory for details

† Standard sizes listed. Other sizes, multi-element configurations, etc., are available.