

Features

- Selection of active area
- Minimizing EMI and microphonics
- Available room temperature or TE-cooled
- Custom gain and bandwidth settings
- Mechanical / optical accessories : filters / mounts, F-O connectors etc.
- Electronic accessories : power supplies, controllers etc.



A 4-pin TO-5 is used for fixed-gain, un-cooled units with active areas up to 3mm diameter. TO-8 packages are used for larger area devices and for applications where user selectability in terms of gain, bandwidth, and offset is desirable. TE-coolers for temperature stabilization and/or performance enhancement can also be added in the TO-8 packages and in the larger T-5 OFHC copper housings. Photoconductor/amplifier modules are available containing PbS, PbSe and HgCdTe devices.

TO-style receiver modules (E5 series)

Type	Part Number	Active Area	Wavelength Range	Output Responsivity (V/W)	Output Noise (V/Hz ^{1/2})	Bandwidth
Silicon	S-010-E5/2K	1mm dia.	300-1000nm	10 ⁸ at 850nm	1.6 x 10 ⁻⁶	DC-2KHz
	S-010-E5/20K	1mm dia.	300-1000nm	10 ⁷ at 850nm	0.6 x 10 ⁻⁶	DC-20KHz
	S-010-E5/1M	1mm dia.	300-1000nm	10 ⁵ at 850nm	0.3 x 10 ⁻⁶	DC-1MHz
	S-010-E5/10M	1mm dia.	300-1000nm	10 ⁴ at 850nm	0.03 x 10 ⁻⁶	DC-10MHz
	S-025-E5/2K	2.5mm dia.	300-1000nm	10 ⁸ at 850nm	10 x 10 ⁻⁶	DC-2KHz
	S-025-E5/20K	2.5mm dia.	300-1000nm	10 ⁶ at 850nm	1 x 10 ⁻⁶	DC-20KHz
	S-025-E5/1M	2.5mm dia.	300-1000nm	10 ⁵ at 850nm	0.4 x 10 ⁻⁶	DC-1MHz
	S-025-E5/10M	2.5mm dia.	300-1000nm	10 ⁴ at 850nm	0.2 x 10 ⁻⁶	DC-10MHz
InGaAs	IGA-010-E5/2K	1mm dia.	900-1700nm	10 ⁸ at 1300nm	1.7 x 10 ⁻⁶	DC-2KHz
	IGA-010-E5/10K	1mm dia.	900-1700nm	10 ⁷ at 1300nm	0.7 x 10 ⁻⁶	DC-10KHz
	IGA-010-E5/1M	1mm dia.	900-1700nm	10 ⁵ at 1300nm	0.15 x 10 ⁻⁶	DC-1MHz
	IGA-010-E5/10M	1mm dia.	900-1700nm	10 ⁴ at 1300nm	0.02 x 10 ⁻⁶	DC-10MHz
	IGA-020-E5/1K	2mm dia.	900-1700nm	10 ⁸ at 1300nm	5 x 10 ⁻⁶	DC-1KHz
	IGA-020-E5/10K	2mm dia.	900-1700nm	10 ⁶ at 1300nm	0.4 x 10 ⁻⁶	DC-10KHz
	IGA-020-E5/1M	2mm dia.	900-1700nm	10 ⁵ at 1300nm	0.25 x 10 ⁻⁶	DC-1MHz
	IGA-030-E5/0.5K	3mm dia.	900-1700nm	10 ⁸ at 1300nm	5 x 10 ⁻⁶	DC-500Hz
	IGA-030-E5/5K	3mm dia.	900-1700nm	10 ⁶ at 1300nm	0.7 x 10 ⁻⁶	DC-5KHz
IGA-030-E5/1M	3mm dia.	900-1700nm	10 ⁴ at 1300nm	0.1 x 10 ⁻⁶	DC-1MHz	

Note : Power Requirements ±5VDC to ±15VDC, 10mA

TO-style receiver modules (E8 series)

Type	Part Number	Active Area	Operating ¹⁾ Wavelength (nm)	Output ²⁾ Responsivity HI/LO (V/W)	NEP (W/Hz ^{1/2})	Bandwidth	Shunt Resistance	Shunt Capacitance (pF)
Silicon	S-010-E8	1mm dia.	300-1000nm	$0.55 \times 10^{10}/10^9$	$< 1.0 \times 10^{-14}$	DC-100Hz	1000M Ω	50 typ.
	S-025-E8	2.5mm dia.	300-1000nm	$0.55 \times 10^9/10^8$	$< 1.2 \times 10^{-14}$	DC-100Hz	250M Ω	250 typ.
	S-050-E8	5mm dia.	300-1000nm	$0.55 \times 10^9/10^8$	$< 1.5 \times 10^{-14}$	DC-100Hz	100M Ω	400 typ.
	S-058-E8	5.8mm sq.	300-1000nm	$0.55 \times 10^9/10^8$	$< 1.2 \times 10^{-14}$	DC-100Hz	100M Ω	1000 typ.
InGaAs	IGA-010-E8	1mm dia.	900-1700nm	$0.9 \times 10^8/10^8$	$< 1.5 \times 10^{-14}$	DC-100Hz	100M Ω min.	80 nom.
	IGA-020-E8	2mm dia.	900-1700nm	$0.9 \times 10^8/10^7$	$< 5 \times 10^{-14}$	DC-2000Hz	10M Ω min.	400 nom.
	IGA-030-E8	3mm dia.	900-1700nm	$0.9 \times 10^8/10^7$	$< 5 \times 10^{-14}$	DC-2000Hz	10M Ω min.	400 nom.
	IGA-050-E8	5mm dia.	900-1700nm	$0.9 \times 10^7/10^6$	$< 1.5 \times 10^{-13}$	DC-2000Hz	1M Ω min.	2500 nom.
Extended InGaAs	IGA1.9-010-E8	1mm dia.	1100-2100nm	$10^7/10^6$	$< 4 \times 10^{-13}$	DC-10KHz	100K Ω	100 typ.
	IGA1.9-030-E8	3mm dia.	1100-2100nm	$10^6/10^5$	$< 1 \times 10^{-12}$	DC-10KHz	10K Ω	1000 typ.
	IGA2.2-010-E8	1mm dia.	1200-2600nm	$10^6/10^5$	$< 1.5 \times 10^{-12}$	DC-10KHz	5K Ω	200 typ.
	IGA2.2-030-E8	3mm dia.	1200-2600nm	$10^5/10^4$	$< 6 \times 10^{-12}$	DC-10KHz	0.5K Ω	2000 typ.
PbS	PBS-010-E8	1mm sq	1000-2800nm	2×10^7	$< 1 \times 10^{-12}$	5-500Hz	-	-
	PBS-020-E8	2mm sq	1000-2800nm	1×10^7	$< 2 \times 10^{-12}$	5-500Hz	-	-
	PBS-030-E8	3mm sq	1000-2800nm	1×10^7	$< 3 \times 10^{-12}$	5-500Hz	-	-
	PBS-050-E8	5mm sq	1000-2800nm	1×10^6	$< 7 \times 10^{-12}$	5-500Hz	-	-
PbSe	PBSE-010-E8	1mm sq	1000-4500nm	1×10^6	$< 3 \times 10^{-11}$	5-10KHz	-	-
	PBSE-020-E8	2mm sq	1000-4500nm	5×10^5	$< 5 \times 10^{-11}$	5-10KHz	-	-
	PBSE-030-E8	3mm sq	1000-4500nm	3×10^5	$< 1 \times 10^{-10}$	5-10KHz	-	-
	PBSE-050-E8	5mm sq	1000-4500nm	2×10^5	$< 2.5 \times 10^{-10}$	5-10KHz	-	-

Note : ¹⁾ Other gain / bandwidth values can be specified
²⁾ At 1300nm, UV-enhanced versions available

