

Infrared Detectors/Photocouplers

Pyroelectric Detectors

(Unless otherwise noted, Typ. Ta=25 °C)

Type No.	Window Material	Active Area (mm)	Spectral Response Range λ (μm)	Sensitivity (500, 1) (V/W)	Noise Max. ($\mu\text{V}/\text{Hz}^{1/2}$)	NEP (500, 1, 1) (W/Hz ^{1/2})	D* (500, 1, 1) ($\text{cm}\cdot\text{Hz}^{1/2}/\text{W}$)	Rise Time t _r 0 to 63% (ms)	Temperature Coefficient of Sensitivity Max. (%/°C)	Supply Voltage (V)	Offset Voltage R _L =22 k Ω (V)
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Dual Element

P4488	7 μm long-pass filter	2x1 (x2)	7 to 20	1300	15	1.0x10 ⁻⁹	1.5x10 ⁸	100	0.2	3 to 15	0.2 to 1.0
P4488-02	5 μm long-pass filter		5 to 20	1500		8.5x10 ⁻¹⁰	1.7x10 ⁸				
P6032	7 μm long-pass filter		7 to 20	1300		1.0x10 ⁻¹	1.5x10 ⁸				
P6052											

Dual Element with Lens

P3514	7 μm long-pass filter	2x1 (x2)	7 to 20	450	15	1.5x10 ⁻⁹	1.0x10 ⁸	100	0.2	3 to 15	0.2 to 1.0
P3514-01											
P3514-02	5 μm long-pass filter		5 to 20	500		1.4x10 ⁻⁹	1.1x10 ⁸				
P3514-03											

Single Element

P3782	Silicon	ϕ 2	2 to 20	1500	15	8.5x10 ⁻¹⁰	1.7x10 ⁸	100	0.2	3 to 15	0.2 to 1.0		
P3782-01	7 μm long-pass filter		7 to 20	1300		1.0x10 ⁻⁹	1.5x10 ⁸						
P3782-05	5 μm long-pass filter		5 to 20	1500		8.5x10 ⁻¹⁰	1.7x10 ⁸						
P4736	Silicon		2 to 20										
P4736-01	7 μm long-pass filter		7 to 20	1300		1.0x10 ⁻⁹	1.5x10 ⁸						
P4736-05	5 μm long-pass filter		5 to 20	1500		8.5x10 ⁻¹⁰	1.7x10 ⁸						
P2613	Silicon		2 to 20	1800		1.0x10 ⁻¹¹	2.0x10 ⁸						
P2613-01	7 μm long-pass filter		7 to 20	1500									
P2613-02	4.3 μm band-pass filter		4.3 (HW=80 nm)	3900 *1								5.0x10 ⁻¹⁰	3.0x10 ⁸
P2613-03	8-14 μm band-pass filter		8 to 14	900								1.0x10 ⁻⁹	2.0x10 ⁸
P2613-12	4.4 μm band-pass filter		4.4 (HW=650 nm)	4100 *2								5.0x10 ⁻¹⁰	3.0x10 ⁸

*1: $\lambda=4.3 \mu\text{m}$

*2: $\lambda=4.4 \mu\text{m}$

Photocouplers

(Typ. Ta=25 °C)

Type No.	Feature	ON Resistance R _{ON} (k Ω)	OFF Resistance R _{OFF} (M Ω)	Isolation Voltage V _{ISO} (Vrms)	Internal Connection	Major Application
P873-G35-380	General purpose	0.2 to 1.0	> 1.0	>5000		General use
P873-G35-201B	High-speed response	1.0 to 5.0	>10			Electronic musical instrument
P873-G35-352	Low ON resistance	0.05 to 0.2	>1.0			Audio instrument, measuring instrument
P873-G35-687	UL listed	0.2 to 1.0	>10			Triac driver, general use
P873-24		1.0 to 3.5				
P873-25		0.2 to 2.5				
P873-G35-911	Dual CdS cell output	0.3 to 1.0	>1.0		Audio instrument, Electronic musical instrument	
P873-13	Independent dual CdS cell output	10 Max.	10			
P1760	Line voltage drive, UL listed	1.5 Max.	1.0	>3000		Cordless telephone, answering telephone