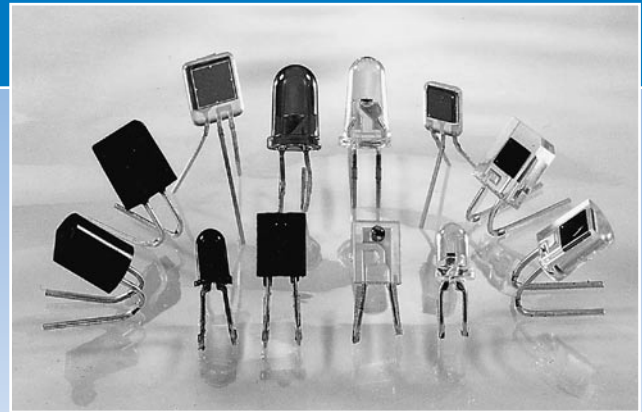


Plastic Encapsulated Series

Lead Frame Molded Photodiodes

OSI Optoelectronics offers a line of high quality and reliability plastic encapsulated photodiodes. These molded devices are available in a variety of shapes and sizes of photodetectors and packages, including industry standard T1 and T13/4, flat and lensed side lookers as well as a surface mount version (SOT- 23). They are excellent for mounting on PCB and hand held devices in harsh environments.

They have an excellent response in the NIR spectrum and are also available with visible blocking compounds, transmitting only in the 700-1100 nm range. They offer fast switching time, low capacitance as well as low dark current. They can be utilized in both photoconductive and photovoltaic modes of operation.



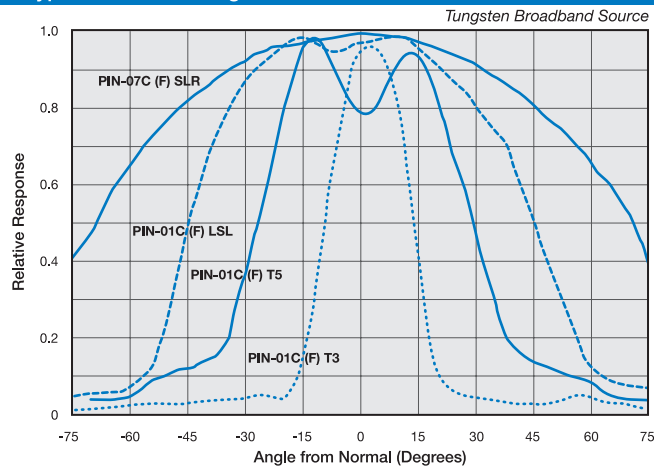
APPLICATIONS

- Bar Code Readers
- Industrial Counters
- Measurement and Control
- IR Remote Control
- Reflective Switches

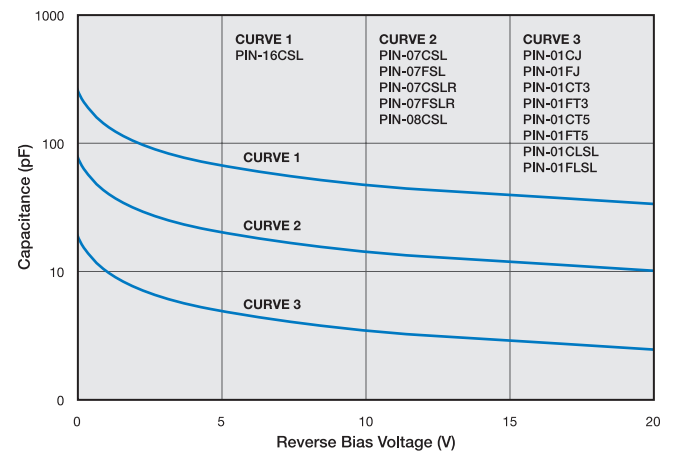
FEATURES

- High Density Package
- Rugged Molded Package
- Low Capacitance
- Low Dark Current
- Lead Frame Standard
- SMT
- Molded Lens Feature
- Side Lookers
- Filter on Chip (700nm Cutoff)

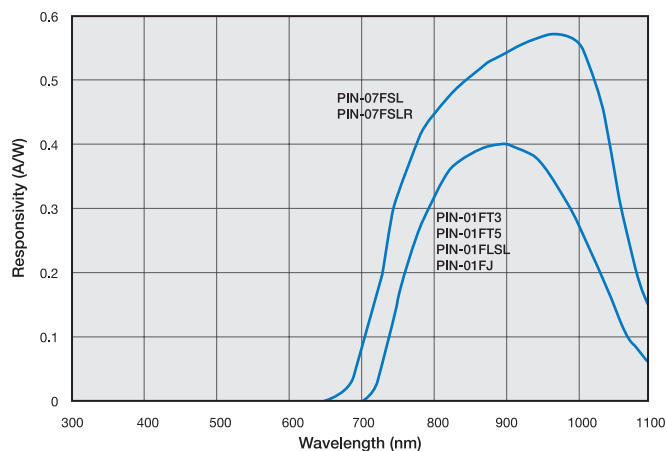
Typical Detection Angular Characteristics



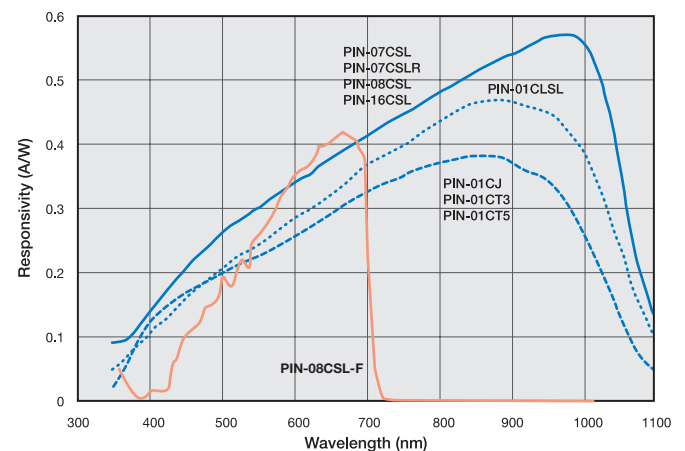
Typical Capacitance vs. Reverse Bias Voltage



Typical Spectral Response



Typical Spectral Response



Plastic Encapsulated Series

Typical Electro-Optical Specifications at $T_A=23^{\circ}\text{C}$

Model Number	Active Area		Spectral Range (nm)	Responsivity $I_p=970\text{nm}$	Capacitance (pF) 1 MHz		Dark Current (nA)		Reverse Voltage (V)	Rise Time (ns)	Temp.* Range ($^{\circ}\text{C}$)		Package Style ¶									
	Area (mm ²)	Dimensions (mm)		(A/W)	0 V	-10 V	-10 V			-10 V peak λ 50 Ω	Operating	Storage										
				typ.	typ.	typ.	typ.	max.		max.				typ.								
PIN-01-CJ	0.2	0.4 Sq	350-1100	0.40	21	4	2	30	20	11	-25 ~ +85	-40 ~ 100	59 / Resin Molded									
PIN-01-FJ			700-1100											58 / Resin Molded								
PIN-01-CT3	0.2	0.4 Sq	350-1100										0.45		10	2	5	50	75	62 / Leadless Ceramic		
PIN-01-FT3			700-1100											60 / Resin Molded								
PIN-01-CT5	0.2	0.4 Sq	350-1100										0.55		60	10	5	50	75	62 / Leadless Ceramic		
PIN-01-FT5			700-1100											60 / Resin Molded								
PIN-01-CLSL	0.2	0.4 Sq	350-1100										0.43@660nm		..	25	..	10	20	11	-25 ~ +85	-40 ~ 100
PIN-01-FLSL			700-1100											0.55								
PIN-0.81-LLS	0.81	1.02	350-1100										0.55		330	55	5	100	100	100	-25 ~ +85	-40 ~ 100
PIN-0.81-CSL			350-1100											60 / Resin Molded								
PIN-4.0-LLS	3.9	2.31x1.68	350-1100	0.55	60	10	5	30	20	11	-25 ~ +85	-40 ~ 100	62 / Leadless Ceramic									
PIN-4.0-CSL			350-1100											60 / Resin Molded								
PIN-07-CSL	8.1	2.84 Sq	350-1100	0.55	85	15	5	30	20	11	-25 ~ +85	-40 ~ 100	57 / Resin Molded									
PIN-07-FSL			700-1100											60 / Resin Molded								
PIN-07-CSLR	8.1	2.84 Sq	350-1100	0.55	85	15	5	30	20	11	-25 ~ +85	-40 ~ 100	56 / Resin Molded									
PIN-07-FSLR			700-1100											60 / Resin Molded								
PIN-08-CSL-F	8.4	2.90 Sq	350-720	0.43@660nm	..	25	..	10	20	75	-25 ~ +85	-40 ~ 100	60 / Resin Molded									
PIN-8.0-LLS	8.4	2.90 Sq	350-1100	0.55	100	25	10	30	20	11	-25 ~ +85	-40 ~ 100	62 / Leadless Ceramic									
PIN-8.0-CSL														350-1100	60 / Resin Molded							
PIN-16-CSL	16	4.00 Sq	350-1100	0.55	330	55	5	100	20	100	-25 ~ +85	-40 ~ 100	60 / Resin Molded									

¶ For mechanical drawings please refer to pages 58 thru 69.

* Non-Condensing temperature and Storage Range, Non-Condensing Environment.

The "CSL-F" series is homogeneous silicon photodiode and optical filter combination device. The filter coating is directly deposited onto the chip during wafer process.

Tape and Reel Specifications for Surface Mount PIN-01(C)J and PIN-01(F)J

