



# SLSD-71N400

## 45mm<sup>2</sup> Solderable Chip Silicon Photodiode with Wire

The SLSD-71N400 is large 45mm<sup>2</sup> active area solderable Silicon Photodiode with wire. The device offers linear short circuit current over a wide range of optical power with high reliability. It is suited for power conversion applications due to their low internal impedance, relatively high shunt impedance, and stability. It is a reliable detector for instrumentation and light beam sensing applications.

### Applications

Light Sensing  
Power Generation

### Features

With 152mm Long Leads  
Low capacitance  
Surface Protected Coating  
45mm<sup>2</sup> Active Area

## Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Reverse Voltage	$V_R$	-	20	V
Operating Temperature	$T_{OP}$	-40	+105	°C
Storage Temperature	$T_{STG}$	-40	+105	°C

Package

Wire on Die

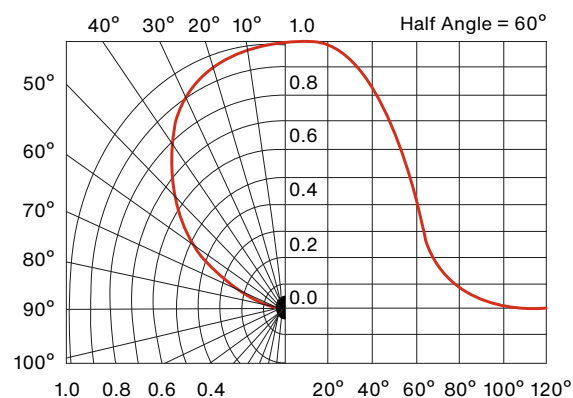
## Typical Electro-Optical Specifications at $T_A=23\text{ }^\circ\text{C}$

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Active Area	-	A.A.	-	45	-	mm <sup>2</sup>
Active Area Dimension	-	A.A. <sub>D</sub>	-	& "01 1.8	-	mm
Spectral Range	Spot Scan	$\Delta\lambda$	350	-	1100	nm
Peak Wavelength	$\lambda=\text{Peak}$	$\lambda_{\text{Peak}}$	-	930	-	nm
Acceptance Half Angle	(off center line)	-	-	60	-	deg
Short Circuit Current	$V_R=0\text{V}$ , $E_e=25\text{mW/cm}^2$ **	$I_{SC}$	1.4	2.3	-	mA
Breakdown Voltage	$I_R=100\mu\text{A}$	-	20	-	-	V
Responsivity	19) 0nm, Flood illumination*	$R_\lambda$	-	0.* 3	-	A/W
Capacitance	$V_R=0\text{V}$ , $E_e=0$ , $f=1\text{MHz}$	C	-	1.5	-	nF
Dark Current	$V_R=5\text{V}$ , $E_e=0$ , $T=25^\circ\text{C}$	$I_D$	-	-	5.0	$\mu\text{A}$
Open Circuit Voltage	$E_e=25\text{mW/cm}^2$	$V_{OC}$	-	0.40	-	V

\*Minimum 50% of active area illuminated

\*\*Light source @ 2854°K

## Directional Sensitive Characteristics



## Mechanical Specifications

Units are inches [mm]

