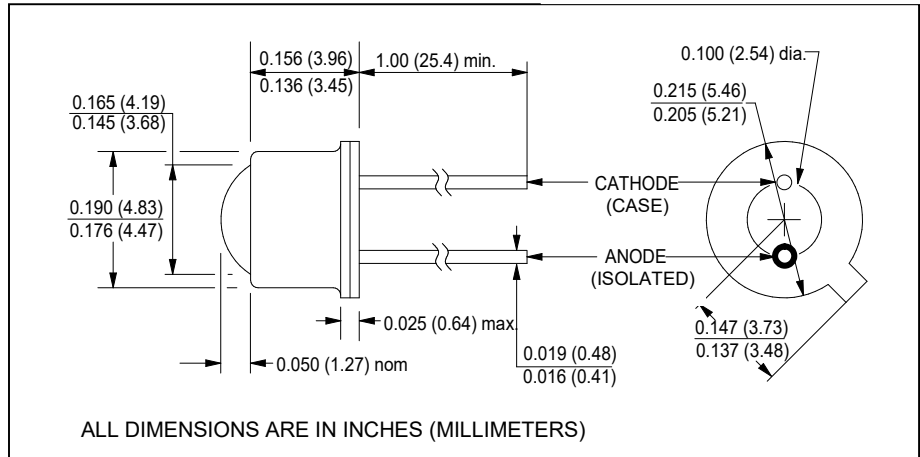
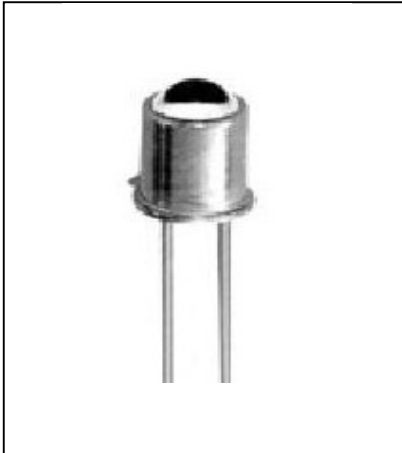


# CLD240

## Silicon PIN Photodiode

13-2400A



### features

- 14° acceptance angle
- 400 nm to 1100 nm response
- TO-46 hermetic package
- 1.346 mm x 1.346 mm active area
- usable for visible through near-IR

### description

The CLD240 is 1.346 mm x 1.346 mm active area silicon PIN photodiode featuring high linearity, low dark current and fast response. Narrow acceptance angle enables excellent on-axis coupling. For additional information, call Clairex.

### absolute maximum ratings (T<sub>A</sub> = 25°C unless otherwise stated)

storage temperature.....	-55°C to +150°C
operating temperature.....	-55°C to +150°C
lead soldering temperature <sup>(1)</sup> .....	260°C
reverse voltage.....	35 V
maximum continuous power dissipation <sup>(2)</sup> .....	200 mW

### notes:

1. 0.06" (1.5 mm) from the header for 5 seconds maximum.
2. Derate linearly 1.28 mW/°C free air temperature to T<sub>A</sub> = +150°C.
3. E<sub>e</sub> = 1 mW/cm<sup>2</sup>, λ = 850 nm.

electrical characteristics (T <sub>A</sub> = 25°C unless otherwise noted)						
symbol	parameter	min	typ	max	units	test conditions
I <sub>SC</sub>	Short-circuit current <sup>(3)</sup>	30	40	-	μA	V <sub>BIAS</sub> = 0 V
I <sub>D</sub>	Dark current	-	-	10	nA	V <sub>R</sub> = 10 V, E <sub>e</sub> = 0
V <sub>BR</sub>	Reverse breakdown	35	50	-	V	I <sub>R</sub> = 100 μA, E <sub>e</sub> = 0
λ <sub>P</sub>	Peak sensing wavelength	-	940	-	nm	
C <sub>J</sub>	Junction capacitance	-	14	-	pF	V <sub>BIAS</sub> = 0 V, f = 1 MHz, E <sub>e</sub> = 0
t <sub>r</sub> , t <sub>f</sub>	Output rise and fall time <sup>(3)</sup>	-	15	20	ns	R <sub>L</sub> = 1 kΩ
Θ <sub>HP</sub>	Total angle at half sensitivity points	-	14	-	deg.	

Clairex reserves the right to make changes at any time to improve design and to provide the best possible product.