

Features

- High output at low current
- Very wide emission angle
- Multiple power ranges
- TO-46 flat window package

Description

The Silonex SLED-56HF3 is a high output Gallium Phosphide light emitting diode which produces a peak radiation at 700 nm when forward biased. It is contained in a low profile flat window TO-46 hermetic package.

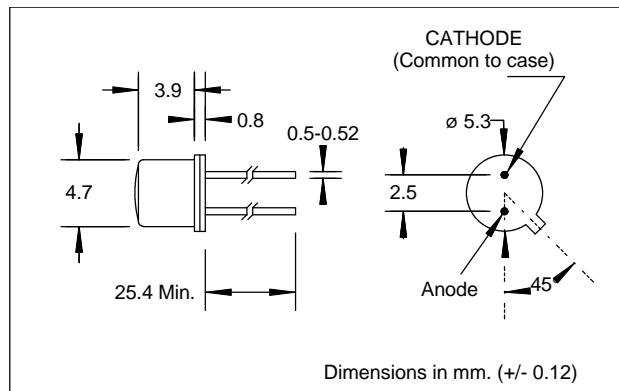
Absolute Maximum Ratings

Storage Temperature	-65 to +125°C
Operating Temperature	-65 to +125°C
Soldering Temperature (1)	260°C
Average Forward Current	50 mA
Power Dissipation (2)	150 mW

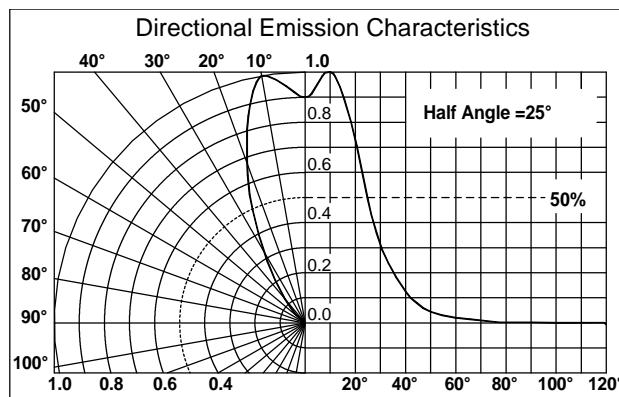
Notes: (1) >2mm from case for <5 sec.

(2) derate 1.5 mW/°C above 25°C

(3) This is the average radiant intensity on a 0.250" diameter surface at a distance of 0.5" from the lens side of the tab to the sensing surface, forming a 30° cone.



Dimensions in mm. (+/- 0.12)


Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	MIN	TYP	MAX	UNITS	TEST CONDITIONS
P_O	Output Power				mW	$I_F = 5 \text{ mA}$
	SLED-56HF3A	0.2			mW	$I_F = 5 \text{ mA}$
	SLED-56HF3B	0.4			mW	$I_F = 5 \text{ mA}$
	SLED-56HF3C	0.7			mW	$I_F = 5 \text{ mA}$
$Ee_{(APT)}$	Aperture Radiant Intensity					
	SLED-56HF3A	0.1			mW/cm^2	$I_F = 50 \text{ mA}, @ 30^\circ (3)$
	SLED-56HF3B	0.5			mW/cm^2	$I_F = 50 \text{ mA}, @ 30^\circ (3)$
	SLED-56HF3C	1.0			mW/cm^2	$I_F = 50 \text{ mA}, @ 30^\circ (3)$
λ_P	Peak Wavelength		700		nm	$I_F = 5 \text{ mA}$
λ_{BW}	Bandwidth		100		nm	$I_F = 5 \text{ mA}$
t_R, t_F	Rise Time, Fall time		500		ns	$I_F = 20 \text{ mA}$
V_F	Forward Voltage			2.4	V	$I_F = 30 \text{ mA}$
V_{BR}	Reverse Breakdown Voltage	5	30		V	$I_R = 10 \mu\text{A}$
I_R	Reverse Current			10	μA	$V = -3.0 \text{ V}$
$\theta_{1/2}$	Half Power Point		25		deg	(off center-line)

Specifications subject to change without notice

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