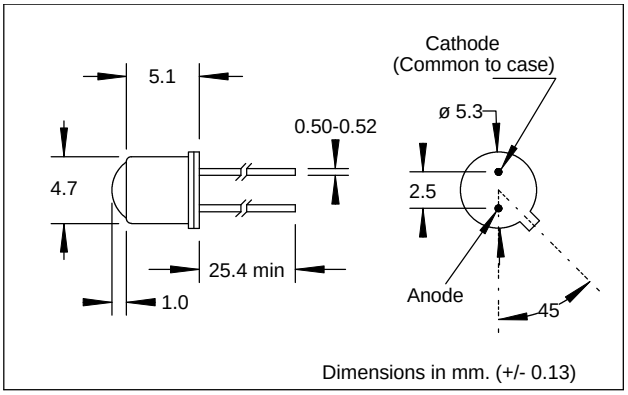
SLED-56HL3

GaP Light Emitting Diode

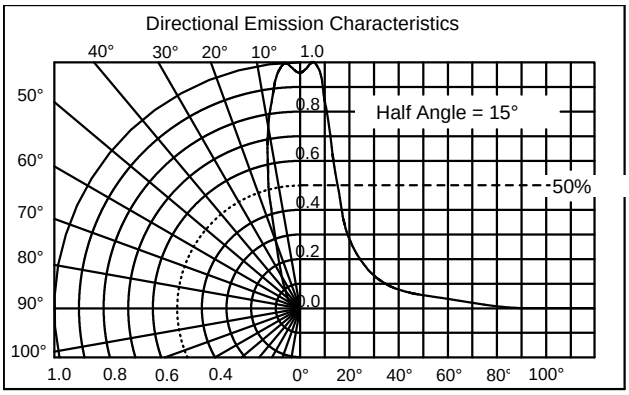
Features

- High output at low current
- Narrow emission angle
- Multiple power ranges
- TO-46 package



Description

The Silonex SLED-56HL3 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 high dome lens, 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 1.5" from the lens side of the tab to the sensing surface, forming a 10° cone.

Electrical Characteristics (T_A=25°C unless otherwise noted)

Symbol	Parameter	MIN	TYP	MAX	UNITS	TEST CONDITIONS
P_O	Output Power					
	SLED-56HL3A		0.4		mW	I_F = 5 mA
	SLED-56HL3B		0.8		mW	I_F = 5 mA
	SLED-56HL3C		1.4		mW	I_F = 5 mA
$Ee_{(APT)}$	Aperture Radiant Intensity					
	SLED-56HL3A	0.1			mW/cm^2	I_F = 50 mA, @ 10° (3)
	SLED-56HL3B	0.5			mW/cm^2	I_F = 50 mA, @ 10° (3)
	SLED-56HL3C	1.0			mW/cm^2	I_F = 50 mA, @ 10° (3)
λ_P	Peak Wavelength		700		nm	I_F = 5 mA
λ_{BW}	Bandwidth		100		nm	I_F = 5 mA
t_R, t_F	Rise time, Fall time		500		ns	I_F = 20 mA
V_F	Forward Voltage			2.4	V	I_F = 30 mA
V_{BR}	Reverse Breakdown Voltage	5	30		V	I_R = 10 µA
I_R	Reverse Current			10	µA	V = - 3.0 V
$\theta_{1/2}$	Half Power Point		15		deg	(off center-line)

Specifications subject to change without notice

103213 REV 1

5200 St. Patrick St., Montreal
Que., H4E 4N9, Canada
Tel: 514-768-8000
Fax: 514-768-8889

The Old Railway, Princes Street
Ulverston, Cumbria, LA12 7NQ, UK
Tel: 01 229 581 551
Fax: 01 229 581 554