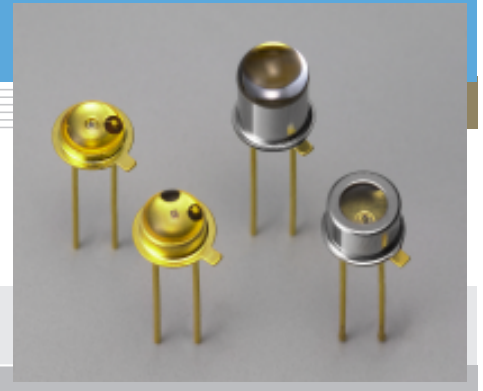


Red LED

L3882, L6108, L6112 series

High output red LED



Features

- High reliability
- High radiant output power

Applications

- Optical switch, etc.

■ Absolute maximum ratings (Ta=25 °C)

Type No.	Forward current IF (mA)	Reverse voltage VR (V)	Pulse forward current *1 IFP (A)	Operating temperature Topr (°C)	Storage temperature *2 Tstg (°C)
L3882	80	5	0.8	-30 to +85	-40 to +100
L6108	70		0.6		
L6112					
L6112-01					
L6112-02					

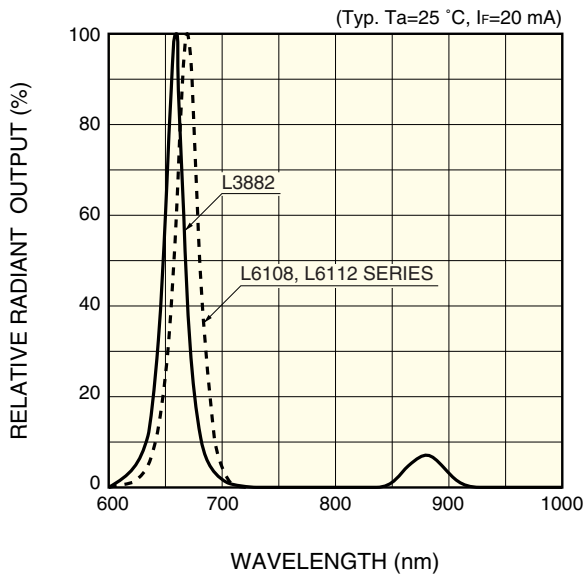
*1: Pulse width=10 μs, Duty ratio=1 %

*2: Guaranteed to resist temperature cycle test of up to 5 cycles.

■ Electrical and optical characteristics (Typ. Ta=25 °C, unless otherwise noted)

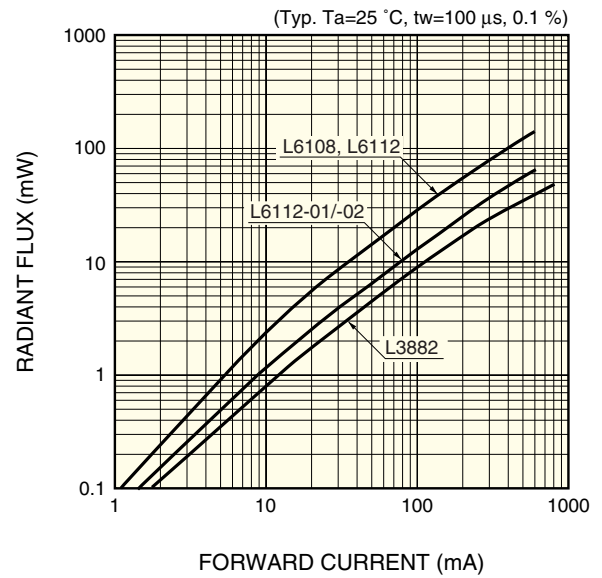
Type No.	Peak emission wavelength λp IF=20 mA			Spectral half width Δλ IF=20 mA (nm)	Forward voltage VF IF=20 mA		Pulse forward voltage VFP IF=IFP		Reverse current IR VR=5 V Max. (μA)	Radiant flux φe IF=20 mA		Radiant illuminance PE IF=50 mA (mW/cm ²)	Cut-off frequency fc IF=50 mA + 1mA _{p-p} (MHz)			
	Min. (nm)	Typ. (nm)	Max. (nm)		Typ. (V)	Max. (V)	Typ. (V)	Max. (V)		Min. (mW)	Typ. (mW)					
L3882	640	660	685	20	1.8	2.0	5.0	7.0	20	1.4	1.8	0.3	5.0			
L6108	650	670	700							2.1	4.9	2.5		0.5		
L6112														4.0	5.5	1.5
L6112-01														1.8	2.5	4.0
L6112-02														1.5		

■ Emission spectrum



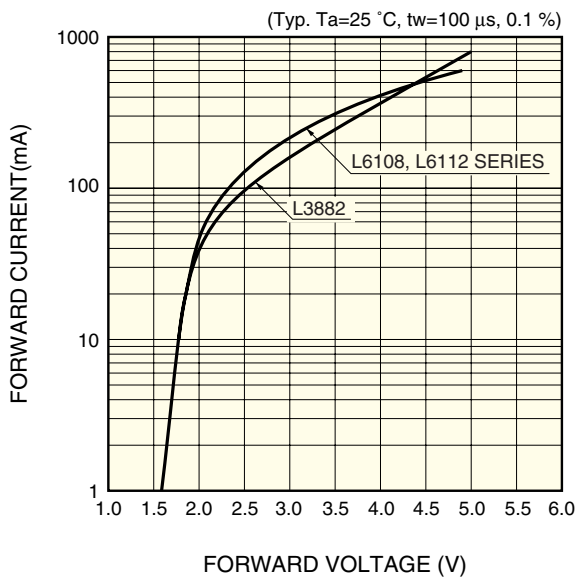
KLEDB0185EA

■ Radiant flux vs. forward current



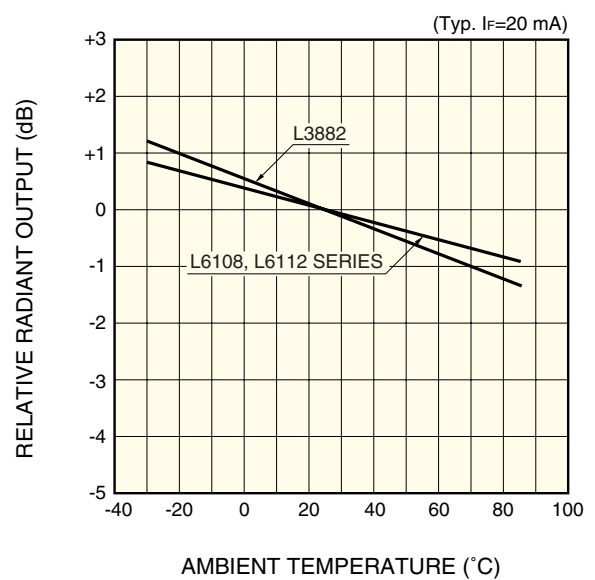
KLEDB0186EA

■ Forward current vs. forward voltage



KLEDB0187EA

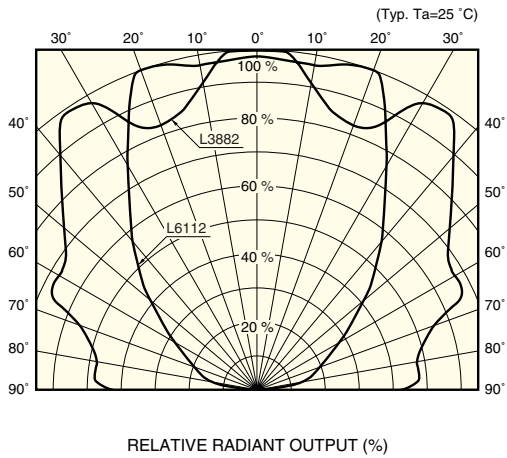
■ Radiant output vs. ambient temperature



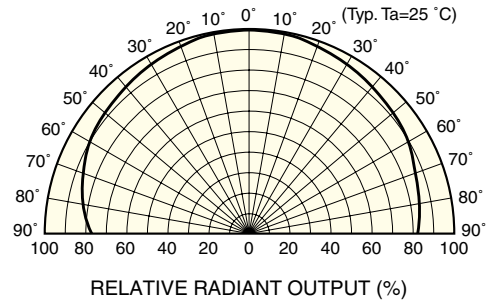
KLEDB0188EA

Directivity

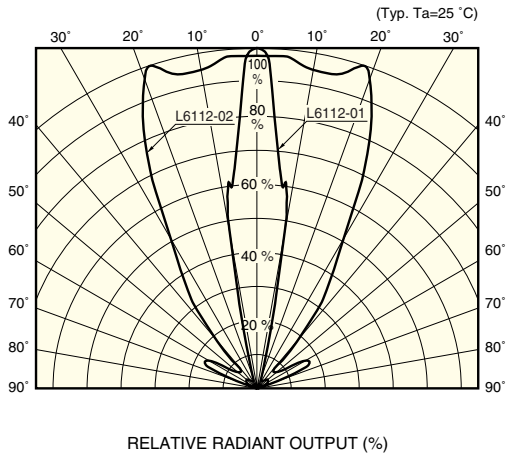
L3882, L6112



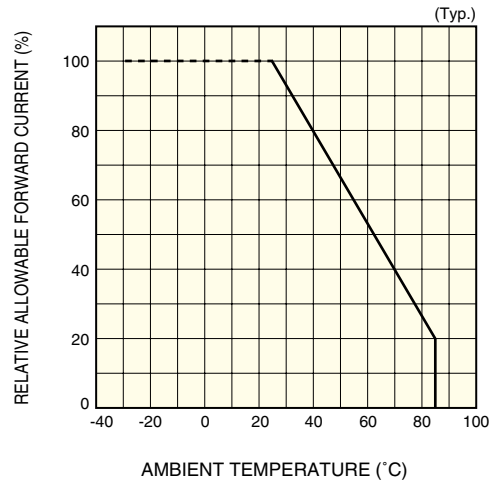
L6108



L6112-01/-02

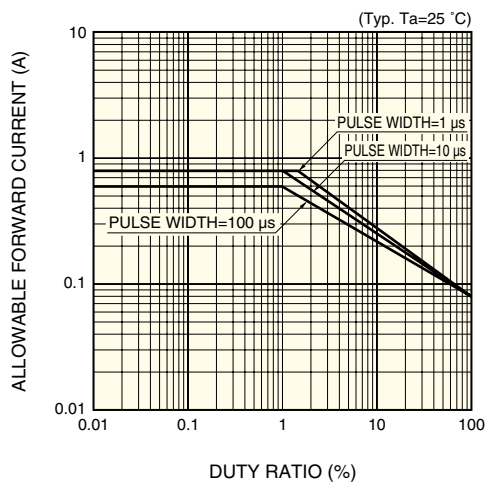


Allowable forward current vs. ambient temperature

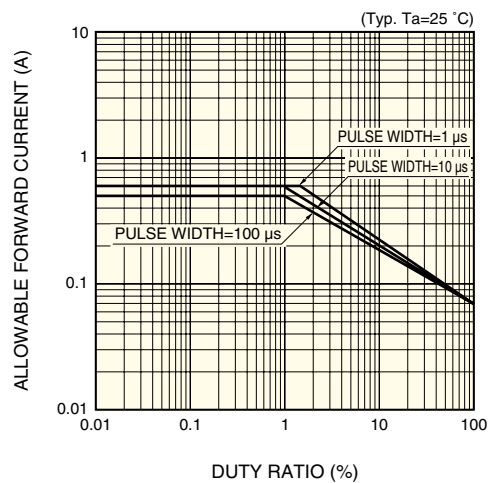


Allowable forward current vs. duty ratio

L3882



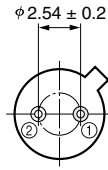
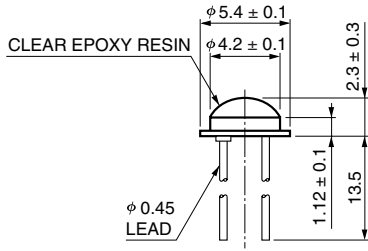
L6108, L6112 series



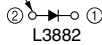
Red LED L3882, L6108, L6112 series

Dimensional outlines (unit: mm)

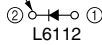
L3882, L6112



COMMON TO CASE

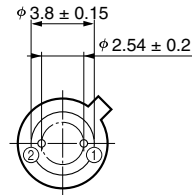
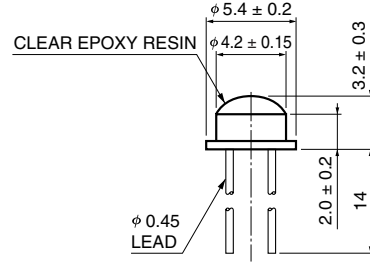


COMMON TO CASE



KLEDA0063EA

L6108

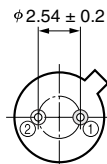
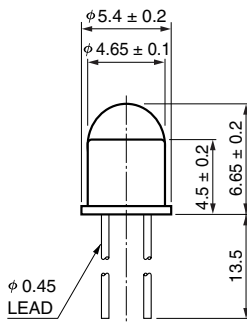


COMMON TO CASE

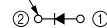


KLEDA0030EC

L6112-01

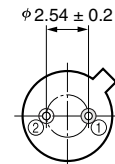
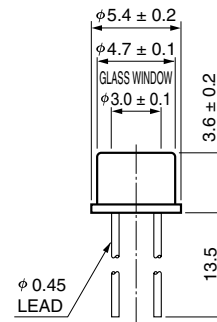


COMMON TO CASE

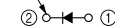


KLEDA0064EA

L6112-02



COMMON TO CASE



KLEDA0065EA

HAMAMATSU

Information furnished by HAMAMATSU is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are subject to change without notice. No patent rights are granted to any of the circuits described herein. ©2001 Hamamatsu Photonics K.K.

HAMAMATSU PHOTONICS K.K., Solid State Division

1126-1 Ichino-cho, Hamamatsu City, 435-8558 Japan, Telephone: (81) 053-434-3311, Fax: (81) 053-434-5184, <http://www.hamamatsu.com>

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P.O.Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1) 908-231-0960, Fax: (1) 908-231-1218

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49) 08152-3750, Fax: (49) 08152-2658

France: Hamamatsu Photonics France S.A.R.L.: 8, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: 33-(1) 69 53 71 00, Fax: 33-(1) 69 53 71 10

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire AL7 1BW, United Kingdom, Telephone: (44) 1707-294888, Fax: (44) 1707-325777

North Europe: Hamamatsu Photonics Norden AB: Smidsvågen 12, SE-171 41 Solna, Sweden, Telephone: (46) 8-509-031-00, Fax: (46) 8-509-031-01

Italy: Hamamatsu Photonics Italia S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39) 02-935-81-733, Fax: (39) 02-935-81-741

Cat. No. KLED1028E01
Apr. 2001 DN