

## 850nm VCSELs KLD085VC-S

### ■ Features

- VCSEL (Vertical Cavity Surface Emitting Laser Diode)
- Cap isolated 2-pin mini can (1.96mm dia.)
- Output power: 2.5mW
- Bandwidth: 4GHz



### ■ Applications

- Short range high-data-rate transmission systems

### ■ Specifications

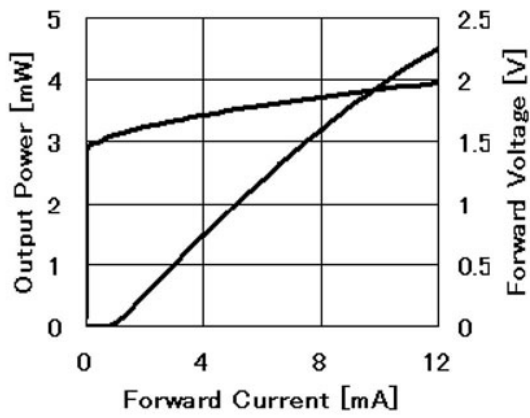
#### ▼ Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
LD forward current	$I_F$	12	mA	
LD reverse voltage	$V_R$	5	V	
Operating temperature	$T_{opr}$	0 to +85		
Storage temperature	$T_{stg}$	0 to +85		

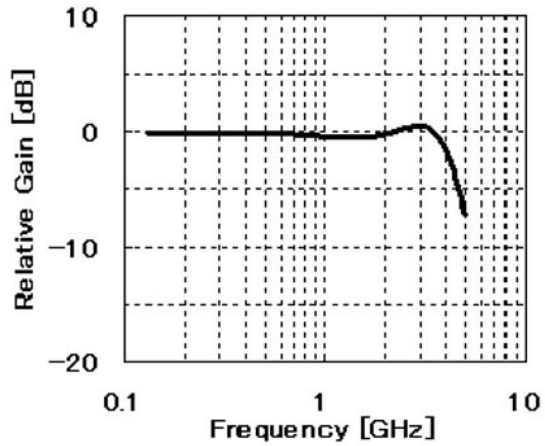
#### ▼ Electrical and Optical characteristics

Parameter	Symbol	Value			Unit	Conditions
		Min.	Typ.	Max		
Forward voltage	$I_D$		1.9		V	CW, $I_F=7mA$
Threshold current	$I_{th}$		1.0	1.4	mA	CW
Optical output power	$P_O$		2.5		mW	CW, $I_F=7mA$
Slope efficiency			0.4		mW/mA	CW, $I_F=7mA$
Peak wavelength		840	850( p)	860	nm	p=Peak wavelength, CW, $I_F=7mA$
Spectral width				0.85	nm	CW, $I_F=7mA$
Bandwidth	BW		4		GHz	$P_O=1.0mW$

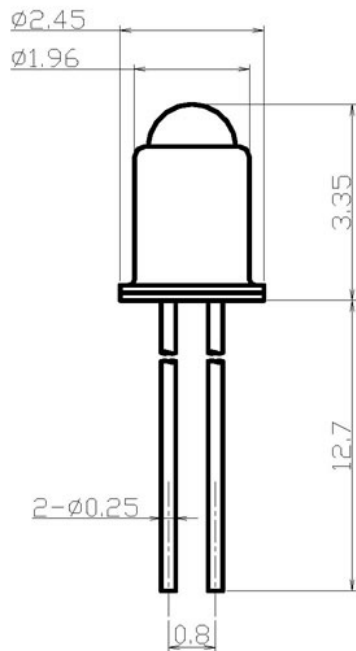
I-L I-V Characteristics



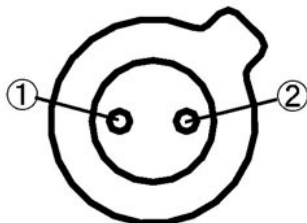
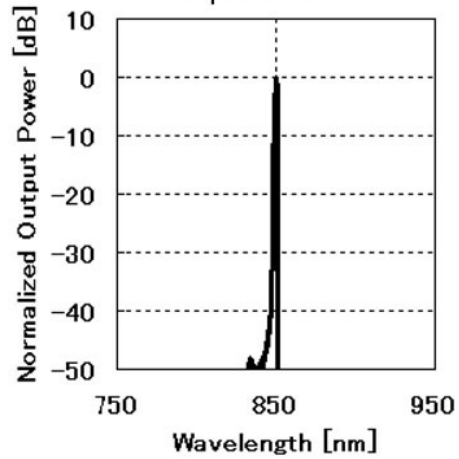
Frequency Response



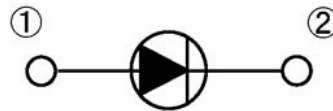
Package Dimension (unit : mm)



Spectrum



Bottom view



Pin Assignment

Specifications are subject to change without notice.