

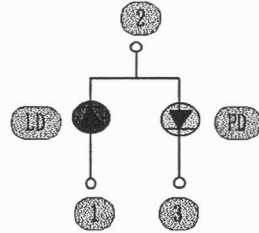
4. SLD63518262 Specifications

■ Description

SLD63518262 is a MOCVD grown 635nm band *InGaAlP* laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 5mW for optoelectronic devices such as laser pointer and Modules.

■ Features

- Visible light output : $\lambda_p = 635\text{nm}$
- Optical power output : 5mW CW
- Built-in photo diode for monitoring laser output
- Package Type : TO-18



■ Absolute maximum ratings ($T_c=25^\circ\text{C}$)

Items	Symbols	Values	Unit
Optical output power	P	7	mW
Laser diode reverse voltage	V	2	V
Photo diode reverse voltage	V	30	V
Operating temperature	T_{opr}	$-10 \sim +60$	$^\circ\text{C}$
Storage temperature	T_{stg}	$-40 \sim +85$	$^\circ\text{C}$

■ Optical and electrical characteristics ($T_c=25^\circ\text{C}$)

Items	Symbols	Min.	Typ.	Max.	Unit	Test Condition
Optical output power	P_o	-	5	-	mW	-
Threshold current	I_{th}	-	30	40	mA	-
Operating current	I_{op}	-	40	50	mA	$P_o=5\text{mW}$
Operating voltage	V_{op}	-	2.2	2.7	V	$P_o=5\text{mW}$
Lasing wavelength	λ_p	630	637	645	nm	$P_o=5\text{mW}$
Beam divergence	$\theta_{ }$	6	8	15	deg	$P_o=5\text{mW}$
	$\theta_{\perp}$	22	35	40	deg	$P_o=5\text{mW}$
Beam angle	$\Delta\theta_{ }$	-	-	± 1.5	deg	$P_o=5\text{mW}$
	$\Delta\theta_{\perp}$	-	-	± 2.5	deg	$P_o=5\text{mW}$
Monitor current	I_m	0.1	0.3	0.5	mA	$P_o=5\text{mW}$
Optical distance	$\Delta X, \Delta Y, \Delta Z$	-	-	± 60	μm	

NOTICE : Samsung only guarantee SLD63518262 to be operated on APC circuit

II. PACKAGE DIMENSIONS

