
HL1560A

1.55 μm InGaAsP Laser Diode

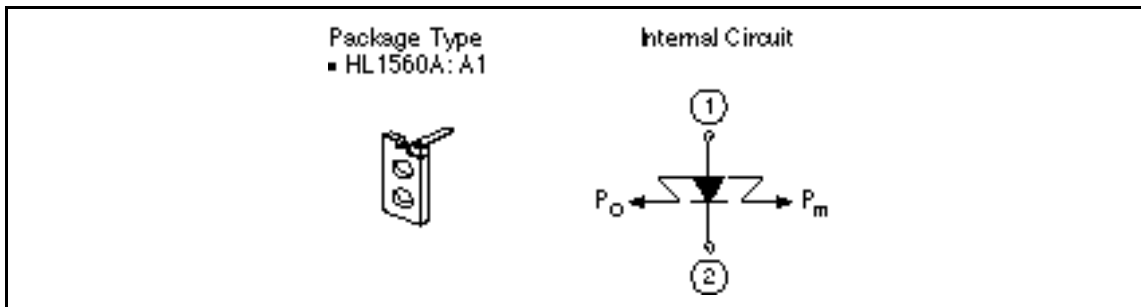
HITACHI

Description

The HL1560A is a 1.55 μm InGaAsP DFB laser diode with a multi-quantum well (MQW) structure. It is designed as a CW light source in fiberoptic communication systems and other types of optical equipment. It has high optical power with low drive current.

Features

- Long wavelength output: 1530 to 1570 nm
- High quantum efficiency: ≈ 0.20 mW/mA



HL1560A

Absolute Maximum Ratings

Item	Symbol	Value	Unit
Optical output power	$P_{O(CW)}$	17	mW
LD Reverse voltage	$V_{R(LD)}$	2	V
Operating temperature	T_{opr}	+10 to +50	°C
Storage temperature	T_{stg}	-40 to +85	°C

Optical and Electrical Characteristics ($T_C = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Threshold current	I_{th}	—	—	30	mA	
Optical output power	P_O	17	—	—	mW	Kink free
Slope efficiency	s	0.20	—	—	mW/mA	
Lasing wavelength	λ	1530	1550	1570	nm	$P_O = 14 \text{ mW}$
Side-mode suppression ratio	S_r	35	—	—	dB	$P_O = 14 \text{ mW}$
Beam divergence (parallel)	//	—	30	—	deg.	$P_O = 14 \text{ mW}$, FWHM
Beam divergence (perpendicular)		—	40	—	deg.	$P_O = 14 \text{ mW}$, FWHM

Typical Characteristics Curves

