

IDT63D5SA

InGaAIP Laser Diode

V.2002

OVERVIEW

IDT63D5SA is a MOCVD grown 635nm band InGaAIP 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 Bar Code Reader.

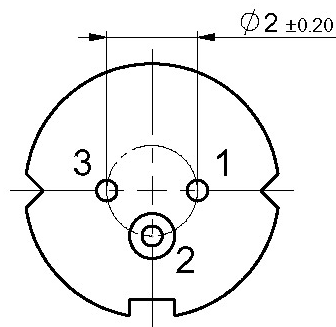
APPLICATION

- Laser Pointer
- Optical Leveler
- Bar Code Reader

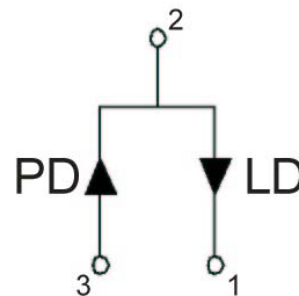
FEATURES

- Visible Light Output : $\lambda_p = 635nm$
- Optical Power Output : 5mW CW
- Package Type : TO-18 ($\varnothing 5.6mm$)
- Built-in Photo Diode for Monitoring Laser Diode

ELECTRICAL CONNECTION



Bottom View



Pin Configuration

ABSOLUTE MAXIMUM RATING AT T_C = 25° C

ITEMS	SYMOLS	VALUES	UNIT
Optical Output Power	P	7	MW
Laser Diode Reverse Voltage	V	2	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	Topr	-10 ~ +50	°C
Storage Temperature	Tstg	-40 ~ +85	°C

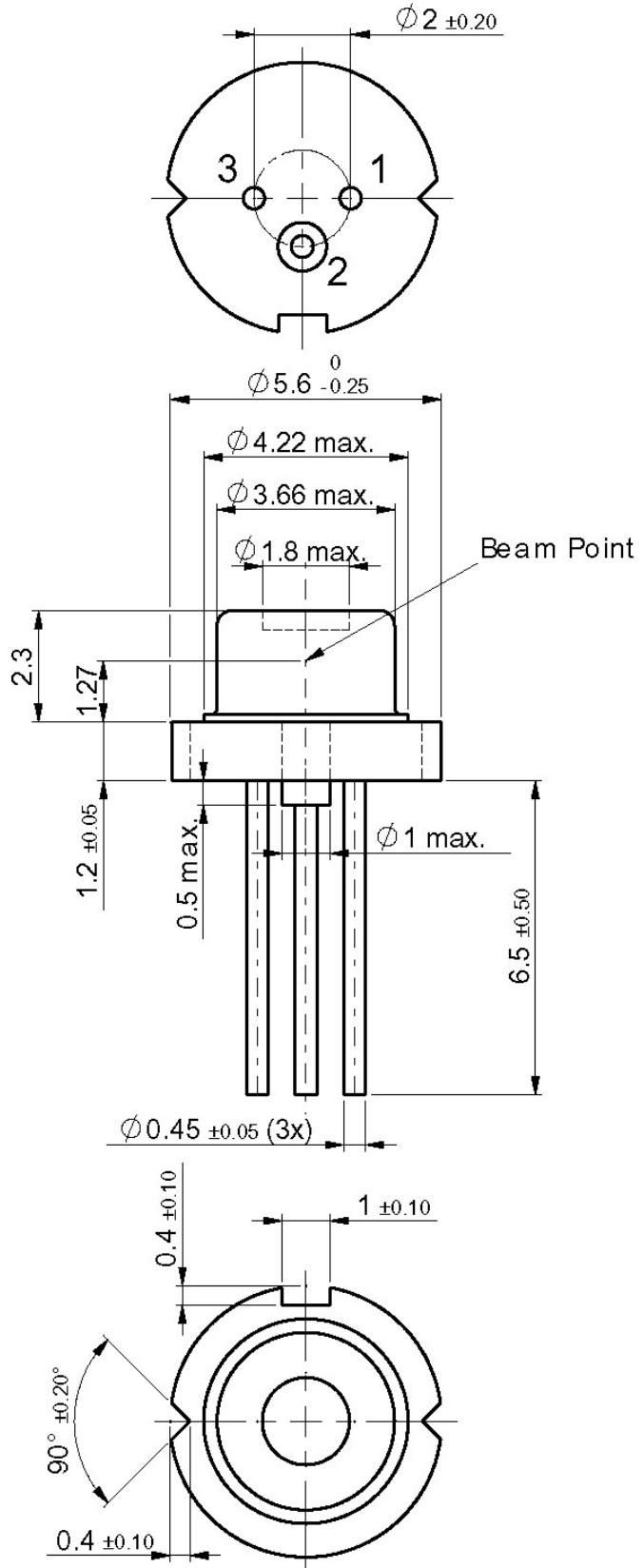
ELECTRICAL AND OPTICAL CHARACTERISTICS AT T_C = 25° C

ITEMS	SYMBOLS	MIN.	TYP.	MAX.	UNIT	CONDITION
Optical Output Power	P _o	-	5	-	mW	-
Threshold Current	I _{th}	-	35	45	mA	-
Operating Current	I _{op}	-	45	60	mA	P _o = 5mW
Operating Voltage	V _{op}	-	2.2	2.7	V	P _o = 5mW
Lasing Wavelength	λ _p	630	637	640	nm	P _o = 5mW
Beam Divergence	θ	7	8	12	deg	P _o = 5mW
	θ _⊥	22	35	40	deg	P _o = 5mW
Beam Angle	Δθ	-	-	±1.5	deg	P _o = 5mW
	Δθ _⊥	-	-	±2.5	deg	P _o = 5mW
Monitor Current	I _m	0.1	0.15	0.5	mA	P _o = 5mW
Optical Distance	ΔX, ΔY, ΔZ	-	-	±60	μm	-

NOTICE: IDT63D5SA to be operated on APC circuit.

The above product specifications are subject to change without notice

PACKAGE DIMENSION



PACKING

