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INDUSTRIAL DESIGN AND TECHNOLOGY

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IDT65D5SA InGaAlP Laser Diode V.2002

OVERVIEW

IDT65D5SA is a MOCVD grown 650nm 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 Bar Code Reader.

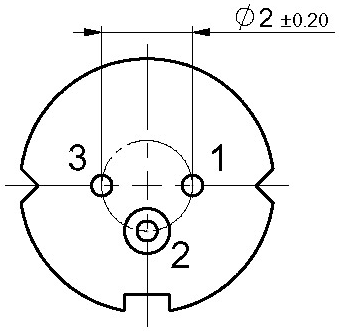
APPLICATION

- *Laser Pointer*
- *Optical Leveler*
- *Bar Code Reader*

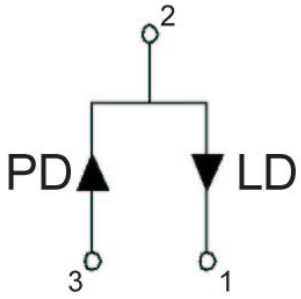
FEATURES

- *Visible Light Output :* *λp = 650 nm*
- *Optical Power Output :* *5mW CW*
- *Package Type :* *TO-18 (Ø 5.6mm)*
- *Built-in Photo Diode for Monitoring Laser Diode*

ELECTRICAL CONNECTION



Bottom View



Pin Configuration

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ABSOLUTE MAXIMUM RATING AT TC = 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 TC = 25°C

ITEMS	SYMBOLS	MIN.	TYP.	MAX.	UNIT	CONDITION
Optical Output Power	Po	-	5	-	mW	-
Threshold Current	Ith	-	35	45	mA	-
Operating Current	Iop	-	45	60	mA	Po = 5mW
Operating Voltage	Vop	-	2.2	2.7	V	Po = 5mW
Lasing Wavelength	λp	630	637	640	nm	Po = 5mW
Beam Divergence	$\theta //$	7	8	12	deg	Po = 5mW
	$\theta \perp$	22	35	40	deg	Po = 5mW
Beam Angle	$\Delta\theta //$	-	-	± 1.5	deg	Po = 5mW
	$\Delta\theta \perp$	-	-	± 2.5	deg	Po = 5mW
Monitor Current	Im	0.1	0.15	0.5	mA	Po = 5mW
Optical Distance	$\Delta X, \Delta Y, \Delta Z$	-	-	± 60	μm	-

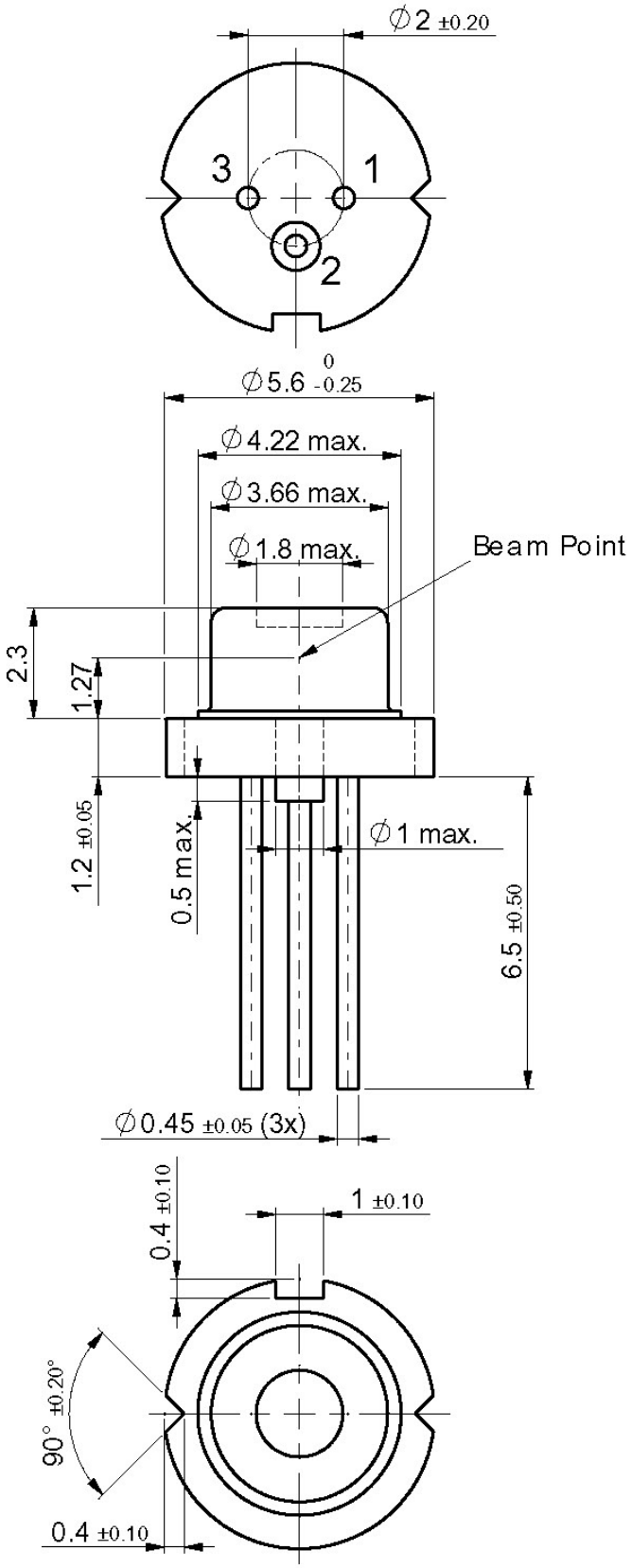
NOTICE: IDT63D5SA to be operated on APC circuit.

The above product specifications are subject to change without notice

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PACKAGE DIMENSION



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PACKING

