

# Laser diode, 635nm, 20mW, diameter 5.6mm

Reference: AM8989

EAN13: -

HS code: 90132000

## Product attributes:

## Product features:

Wavelength: 635-640 nm

Housing: TO-18

Waterproof grade: IP20

## Product description:

Laser diode with a wavelength of 635nm and a power of 20mW.

wavelength 635nm

voltage 2.3-2.6V

reverse voltage 10V

current 75-85mA

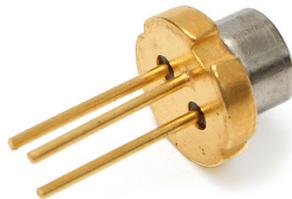
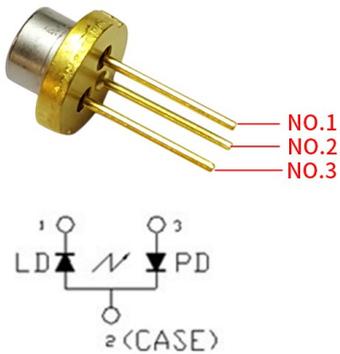
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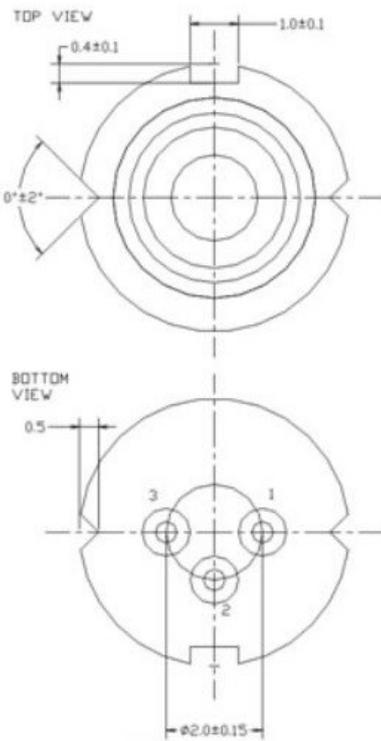
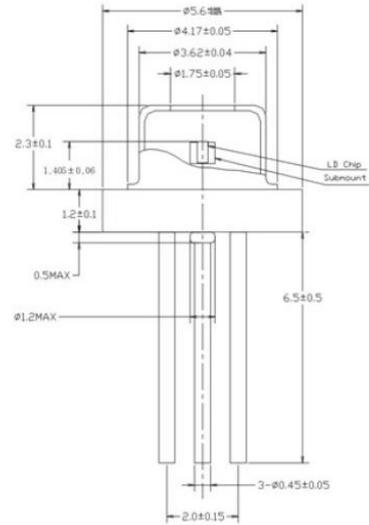
working temperature -10 - 50 °C

size 5.6x5.6x10 mm

price for 1 pc

Pin assignment: pin no. 2 (case)=ANODE, pin no. 1=LD cathode, pin no. 3=PD anode





◆ ABSOLUTE MAXIMUM RATING at  $T_c=25^{\circ}\text{C}$

Items	Symbols	Values	Unit
Optical Output Power	P	22	mW
Laser Diode Reverse Voltage	V	10	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	$T_{\text{op}}$	-10 ~ +50	$^{\circ}\text{C}$
Storage Temperature	$T_{\text{stg}}$	-40 ~ +85	$^{\circ}\text{C}$

◆ ELECTRICAL and OPTICAL CHARACTERISTICS at  $T_c=25^{\circ}\text{C}$

Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	$P_o$	-	20	-	mW	-
Threshold Current	$I_{\text{th}}$	-	50	60	mA	-
Operating Current	$I_{\text{op}}$	-	75	85	mA	$P_o=20\text{mW}$
Operating Voltage	$V_{\text{op}}$	-	2.3	2.6	V	$P_o=20\text{mW}$
Slope Efficiency	$\eta_s$	0.4	0.7	1.0	mW/mA	$P_o=20\text{mW}$
Lasing Wavelength	$\lambda_p$	634	639	644	nm	$P_o=20\text{mW}$
Beam Divergence	$\theta_{\text{H}}$	6	9	12	deg	$P_o=20\text{mW}$
	$\theta_{\text{V}}$	25	30	35	deg	$P_o=20\text{mW}$
Beam Angle	$\Delta\theta_{\text{H}}$	-3	-	3	deg	$P_o=20\text{mW}$
	$\Delta\theta_{\text{V}}$	-3	-	3	deg	$P_o=20\text{mW}$
Monitor Current	$I_m$	0.1	0.2	0.4	mA	$P_o=20\text{mW}$
Optical Distance	$\Delta X, \Delta Y, \Delta Z$	-	-	$\pm 60$	$\mu\text{m}$	-