

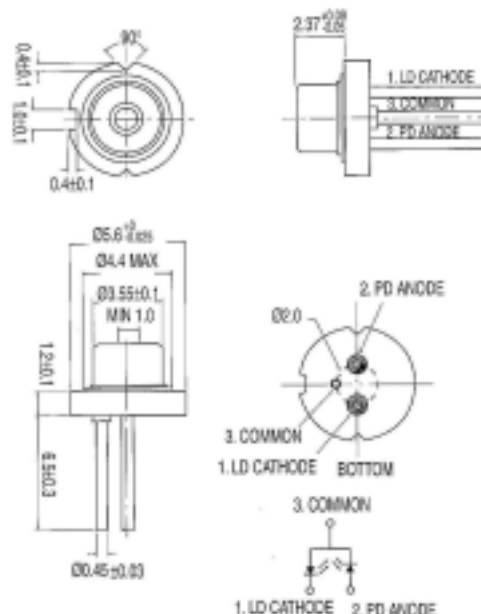


DB LECTRO
COMPOSANTS ÉLECTRONIQUES
ELECTRONIC COMPONENTS

6350-1271-AU 635nm 5 mW Laser Diodes AUTO PACKAGE

Specifications

Device Laser Diode
Package Type TO-18(ϕ 5.6mm)



■ Absolute Maximum Ratings($T_c=25^\circ\text{C}$)

Characteristics	Symbols	Ratings	Units
Optical Output	P_o	7	mW
Reverse Voltage	Laser V_r	2	V
	PIN PD $V_r(\text{PIN})$	10	V
Operating Temperature	T_{op}	-10 +40	
Storage Temperature	T_{stg}	-40 +85	

■ Electrical and optical Characteristics($T_c=25^\circ\text{C}$)

Characteristics	Symbols	Conditions	Min.	Typ.	Max.	Units
Threshold Current	I_{th}	-	-	25	35	mA
Operating Current	I_{op}	$P_o=5\text{mW}$	-	35	40	mA
Operating Voltage	V_{op}	$P_o=5\text{mW}$	-	2.3	2.7	Volts
Slope Efficiency	η	2mW	0.35	0.55	1.0	mW/mA
		$I(5\text{mW})-I(3\text{mW})$				
Monitor Current	I_m	$P_o=5\text{mW}$	-	0.05	0.8	mA
Beam Divergence (FWHM)	Parallel $\theta //$	$P_o=5\text{mW}$	6	8	15	deg.
	Prependicular θ	$P_o=5\text{mW}$	22	35	40	deg.
Parallel Deviation Angle	$\Delta \theta //$	$P_o=5\text{mW}$	-3	-	3	deg.
Perpendicular Deviation Angle	$\Delta \theta$	$P_o=5\text{mW}$	-3	-	3	deg.
Emission Point Accuracy	ΔX	$P_o=5\text{mW}$	-80	-	80	μm
	ΔY	$P_o=5\text{mW}$	-80	-	80	μm
	ΔZ	$P_o=5\text{mW}$	-80	-	80	μm
Lasing Wavelength	λ	$P_o=5\text{mW}$	630	637	640	nm

I_m is sorting by custom's need

$\theta //$ and θ are defined as the angle within which the intensity is 50% of the peak value.

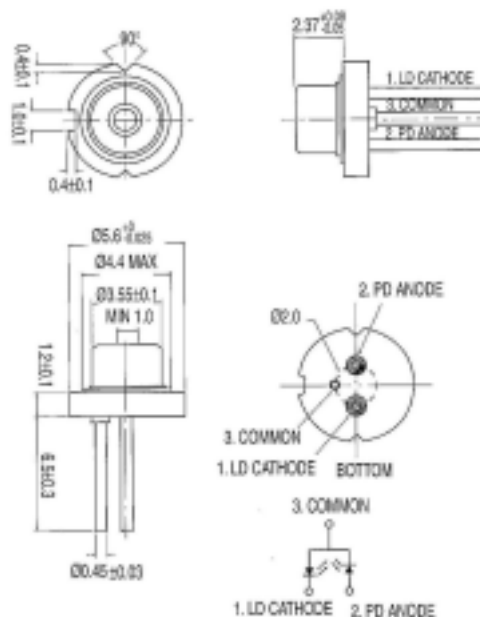


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Characteristics	Symbols	Conditions	Min.	Typ.	Max.	Units
Threshold Current	I_{th}	-	-	25	35	mA
Operating Current	I_{op}	$P_o=5\text{mW}$	-	35	45	mA
Operating Voltage	V_{op}	$P_o=5\text{mW}$	-	2.3	2.7	Volts
Slope Efficiency	η	2mW	0.35	0.55	1.0	mW/mA
		$I(5\text{mW})-I(3\text{mW})$				
Monitor Current	I_m	$P_o=5\text{mW}$	-	0.05	0.8	mA
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