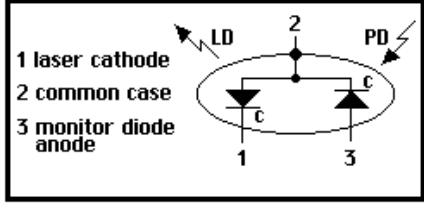


# US-Lasers: 808nm-5mW - Infrared Laser Diode

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## INFRARED DIODE LASER DATA SHEETS

## ABSOLUTE MAXIMUM RATINGS - (Tc=25 °C)

TECHNICAL DATA for LASER DIODE		 Pin Out Diagram - Style A
• Index Guided MQW Structure		
• Wavelength: 808nm (Typ.)		
• Optical Power: 5mW CW		
• Threshold Current: 25mA (Typ.)		
• Standard Package: 5.6mm		
Infrared light output	808nm	
Optical power output	5mW CW	
Package Type	5.6mm	
Built-in photo diode for monitoring laser output		

Items	Symbols	Values	Unit
Optical output power	Po	5	mW
Laser diode reverse voltage	VLDR	2	V
Photo diode reverse voltage	VPDR	30	V
Operating temperature	Topr	-10 ~ +40	°C
Storage temperature	Tstg	-40 ~ +85	°C

## OPTICAL and ELECTRICAL CHARACTERISTICS - (Tc=25 °C)

Items	Symbols	Min.	Typ.	Max.	Unit	Test Condition			
Optical output power	Po	-	5	-	mW	-			
Threshold current	Ith	10	20	35	mA	-			
Operating current	Iop	15	25	45	mA	Po=5mW			
Operating voltage	Vop	1.9	2.1	2.5	V	Po=5mW			
Lasing wavelength	λ D	800	808	820	nm	Po=5mW			
Beam divergence	θ F	8	11	15	deg	Po=5mW			
Beam divergence	θ z	20	35	45	deg	Po=5mW			
Slope Efficiency (mW/mA)	0	0.1	0.3	0.6		-			
Monitor current	Im	10	100	200	μ A	Po=5mW,Vr=5V			
Astigmatism	As	-	11	-	μ m	Po=5mW			
MTTF		3000-5,000 hrs.				Po=5mW,NA=0.4			
Emitter Size	1 x 4 Microns								
Emitter Distance to Cap Lens	0.3mm								
Structure	Index Guided								