

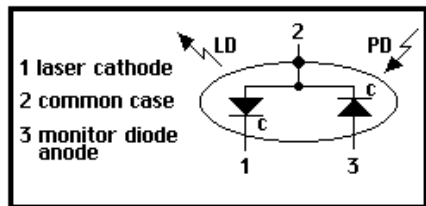
US-Lasers: 904nm-5mW - Infrared Laser Diode

[Back to Laser Diodes](#)

INFRARED DIODE LASER DATA SHEETS

(T_c=25 °C)

ABSOLUTE MAXIMUM RATINGS -

TECHNICAL DATA for LASER DIODE ● Index Guided MQW Structure ● Wavelength: 904nm (Typ.) ● Optical Power: 5mW CW ● Threshold Current: 20mA (Typ.) ● Standard Package: 5.6mm		
Infrared light output	904nm	
Optical power output	5mW CW	
Package Type	5.6mm	
Built-in photo diode for monitoring laser output		
		Pin Out Diagram - Style A

Items	Symbols	Values	Unit
Optical output power	P _o	5	mW
Laser diode reverse voltage	V _{LDR}	2	V
Photo diode reverse voltage	V _{PDR}	30	V
Operating temperature	T _{opr}	-10 ~ +40	°C
Storage temperature	T _{stg}	-40 ~ +85	°C

OPTICAL and ELECTRICAL CHARACTERISTICS - (T_c=25 °C)

Items	Symbols	Min.	Typ.	Max.	Unit	Test Condition
Optical output power	P _o	-	5	-	mW	-
Threshold current	I _{th}	10	20	35	mA	-
Operating current	I _{op}	15	25	45	mA	P _o =5mW
Operating voltage	V _{op}	2.0	2.4	2.7	V	P _o =5mW
Lasing wavelength	λ _D	894	904	914	nm	P _o =5mW
Beam divergence	θ _F	8	10	11	deg	P _o =5mW
Beam divergence	θ _z	25	31	40	deg	P _o =5mW
Slope Efficiency (mW/mA)	η	0.4	0.5	0.7	-	-
Monitor current	I _m	10	100	200	μA	P _o =5mW, V _r =5V
Astigmatism	As	-	11	-	μm	P _o =5mW
MTTF			3000-5,000 hrs.			P _o =5mW, NA=0.4
Emitter Size	1 x 4 Microns					
Emitter Distance to Cap Lens	0.3mm					
Structure	Index Guided					