

NVG, INC.

VISIBLE LASER DIODES

Technical Data



MODEL # D660-5

VISIBLE DIODE LASER ABSOLUTE MAXIMUM RATINGS - (T_c=25 °C)

TECHNICAL DATA		
<ul style="list-style-type: none"> • Index Guided MQW Structure • Wavelength: 660nm (Typ.) • Optical Power: 5mW CW • Threshold Current: 20mA (Typ.) • Standard Package: 5.6mm 		
Visible light output	650nm	Pin Out Diagram
Optical power output	5mW CW	
Package Type	5.6mm	
Built-in photo diode for monitoring laser output		

Items	Symbols	Values	Unit
Optical output power	P _o	7	mW
Laser diode reverse voltage	VLDR	2	V
Photo diode reverse voltage	VPDR	30	V
Operating temperature	T _{opr}	-10 ~ +60	°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}	-	20	40	mA	-
Operating current	I _{op}	-	40	60	mA	P _o =5mW
Operating voltage	V _{op}	-	2.7	-	V	P _o =5mW
Lasing wavelength	λ	655	660	665	nm	P _o =5mW
Beam divergence	θ _Φ	-	5	11	deg	P _o =5mW
Beam divergence	θ _ζ	-	25	37	deg	P _o =5mW
Slope Efficiency (mW/mA)	η	0.3	0.7	0.9	-	-
Monitor current	I _m	-	10	20	μA	P _o =5mW, V _R =5V
Astigmatism	As	-	11	-	μm	P _o =5mW
MTTF			10,000 hrs.			P _o =5mW, NA=0.4

Emitter Distance to Cap Lens	0.3mm
Emitter Size	1 x 4 Microns
Structure	Index Guided

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