NVG, INC.

VISIBLE LASER DIODES

Technical Data

MODEL # SD635-5

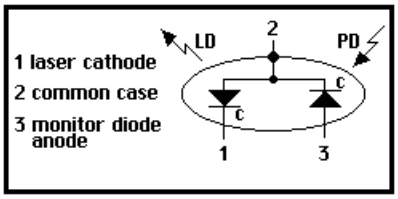
VISIBLE DIODE LASER ABSOLUTE MAXIMUM RATINGS - (Tc=25 °C)

TECHNICAL DATA

- **Index Guided MQW Structure**
- **Wavelength: 635nm (Typ.)**
- **Optical Power: 5mW CW**
- **Threshold Current: 30mA (Typ.)**
- **Standard Package: 5.6mm**

Visible light output	635nm
Optical power output	5mW CW
Package Type	5.6mm
Built-in photo diode for monitoring laser output	

Pin Out Diagram



Items	Symbols	Values	Unit
Optical output power	Po	7	mW
Laser diode reverse voltage	VLDR	2	V
Photo diode reverse voltage	VPDR	30	V
Operating temperature	Topr	-10 ~ +50	°C
Storage temperature	Tstg	-40 ~ +85	°C

OPTICAL and ELECTRICAL CHARACTERISTICS - (Tc=25 ºC)

Items	Symbols	Min.	Typ.	Max.	Unit	Test Condition
Optical output power	Po	-	5	-	mW	-
Threshold current	Ith	-	30	40	mA	-
Operating current	Iop	-	40	50	mA	Po=5mW
Operating voltage	Vop	-	2.3	2.7	V	Po=5mW
Lasing wavelength	8Δ	630	637	640	nm	Po=5mW
Beam divergence	θΦ	6	8	10	deg	Po=5mW
Beam divergence	θζ	22	35	40	deg	Po=5mW
Slope Efficiency (mW/mA)	0	0.3	0.7	0.9		-
Monitor current	Im	100	150	500	μA	Po=5mW,VR=5V
Astigmatism	As	-	11	-	μm	Po=5mW
MTTF			10,000 hrs.			Po=5mW,NA=0.4

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

NVG, Inc., 1 Laser Lane, Hazlehurst, GA 31539 * 912-379-9000 * 912-375-9555 fax