



Model No. LD635A5C15 (LD-635-5I)
635nm 5mW 50°C Laser Diode in TO-18 Ø5.6mm Package

FEATURES

- 635nm 5mW AlGaInP Visible Laser Diode
- High temperature operation
- High assembly accuracy
- Low operating current
- Package: TO-18 (dia. 5.6mm)

APPLICATIONS

- High precision measuring instruments
- High precision industrial laser markers
- Survey and engineering instruments
- Industrial laser markers
- Laser pointer

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	CONDITION	RATING	UNIT
LIGHT OUTPUT POWER	P _O	CW	7	mW
REVERSE VOLTAGE (LD)	V _{RL}	-	2	V
REVERSE VOLTAGE (PD)	V _{RD}	-	30	V
FORWARD CURRENT (PD)	I _{FD}	-	10	mA
CASE TEMPERATURE	T _C	-	-10 to +50	°C
STORAGE TEMPERATURE	T _S	-	-40 to +85	°C

ELECTRICAL AND OPTICAL CHARACTERISTICS (T_C = 25 °C)

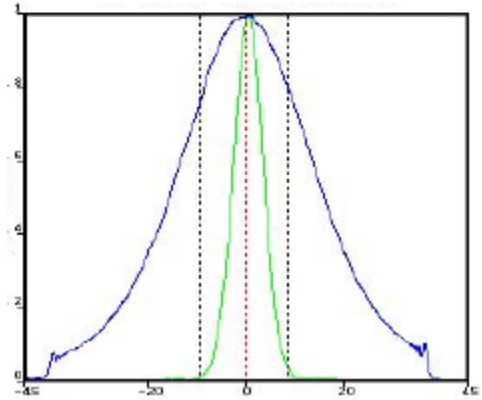
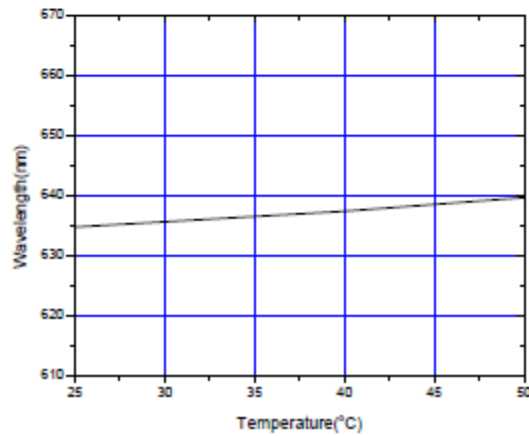
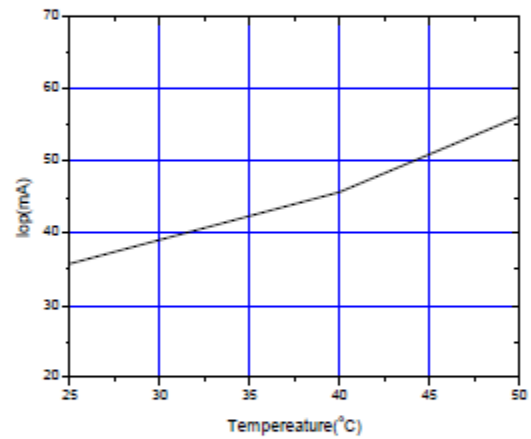
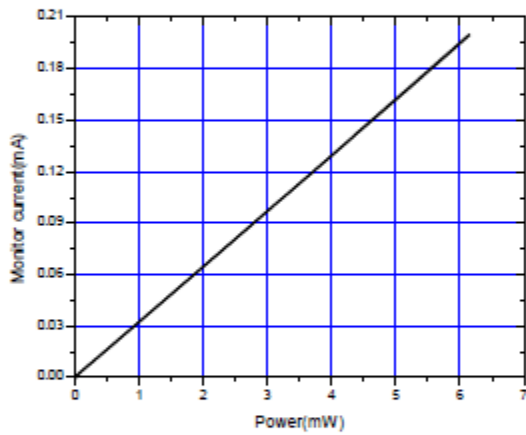
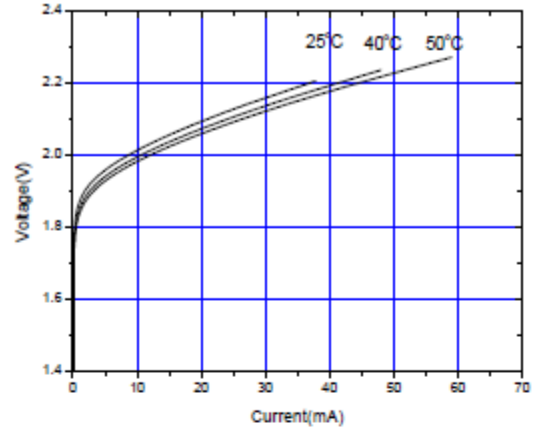
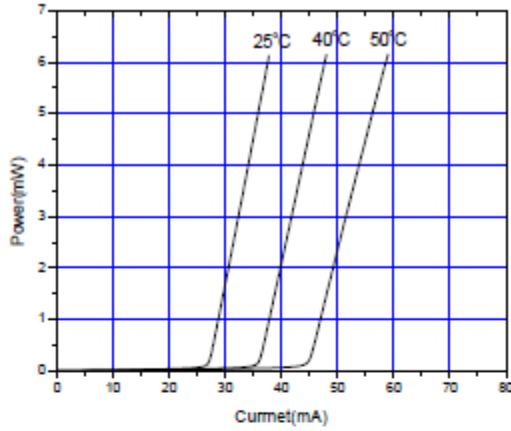
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS
PEAK WAVELENGTH	λ	630	635	640	nm	P _O = 5mW
THRESHOLD CURRENT	I _{th}	-	24	30	mA	
OPERATING CURRENT	I _{op}	-	33	40	mA	P _O = 5mW
OPERATING VOLTAGE	V _{op}	-	2.2	2.5	V	P _O = 5mW
DIFFERENTIAL EFFICIENCY	η	0.4	0.6	0.8	mW/mA	P _O = 3-5mW
MONITOR CURRENT	I _m	0.1	0.15	0.3	mA	P _O = 5mW, V _{RD} = 5V
PARALLEL DIVERGENCE ANGLE	Θ _{//}	6	7.5	11	deg	
PERPENDICULAR DIVERGENCE ANGLE	Θ _⊥	30	33	40	deg	
PARALLEL FFP DEVIATION ANGLE	Δ Θ _{//}	-2	0	+2	deg	P _O = 5mW
PERPENDICULAR FFP DEVIATION ANGLE	Δ Θ _⊥	-2	0	+2	deg	
EMISSION POINT ACCURACY	Δx Δy Δz	-60	0	+60	um	

Note: The above specifications are subject to change without notice.





TYPICAL CHARACTERISTICS



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