

DL-3149-057

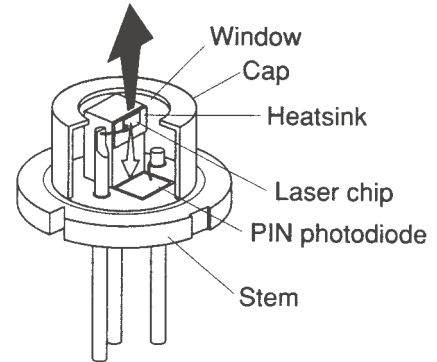
Wellenlänge: 670nm (typ.)
 Geringer Schwellstrom: 25mA (typ.)
 Hohe Betriebstemperatur: bis +60°C.



Anwendungsgebiete:
 Laserdrucker
 Barcodescanner
 Sensorik
 Analytische Meßgeräte

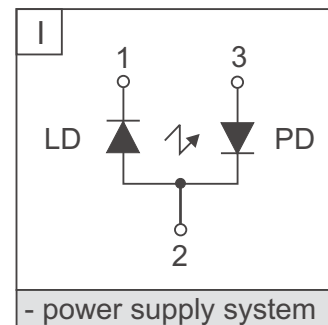
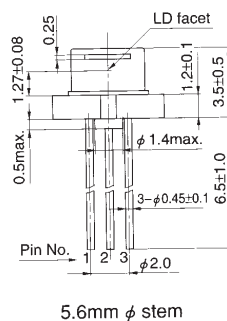
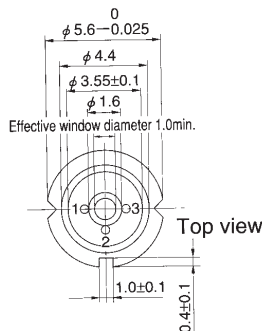
Maximalwerte

Parameter		Symbol	Wert	Einheit
Ausgangsleistung	CW	Po	7	mW
	Laser	VR	2	V
Sperrspannung	Laser	VR	2	V
	PIN	VR	30	V
Betriebstemperatur		Topr	-10...+60	°C
Lagertemperatur		Tstr	-40...+85	°C



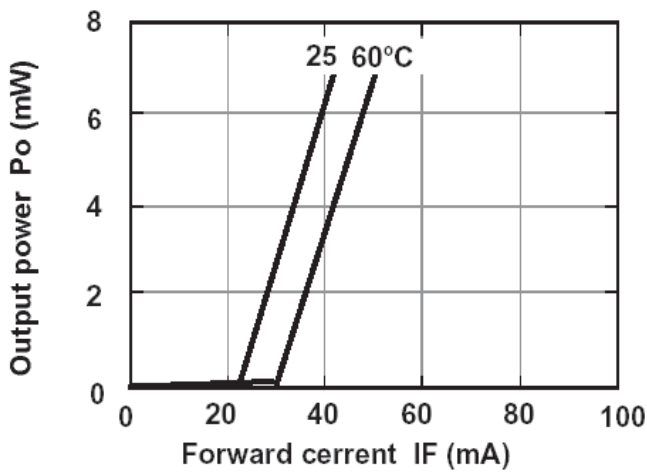
Elektrische und optische Eigenschaften bei 25°C

Parameter	Symbol	Betriebsbedingung	Min.	Typ.	Max.	Einheit
Schwellstrom	I _{th}	CW	---	25	35	mA
Betriebsstrom	I _{op}	Po=5mW	---	40	45	mA
Wellenlänge	λ	Po=5mW	660	670	678	nm
Strahldivergenz	Senkrecht	θ _⊥	---	30	35	deg.
	Parallel	θ	---	8	10	deg.
Strahlabweichung	Senkrecht	Δθ _⊥	---	---	+/-3	deg.
	Parallel	Δθ	---	---	+/-3	deg.
Differentieller Wirkungsgrad	dPo/dI _{op}	Po=5mW	0,2	0,4	0,6	mW/mA
Monitordiodenstrom	I _m	Po=5mW	0,5	1,5	2,0	mA
Astigmatismus	As	Po=5mW	---	8	---	μm

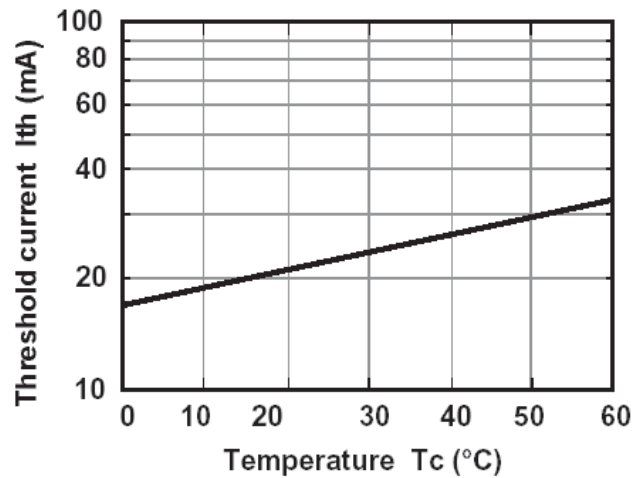


Characteristics

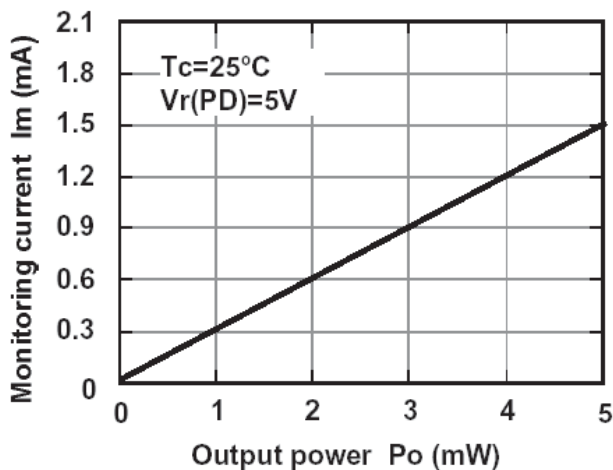
Output power vs. Forward current



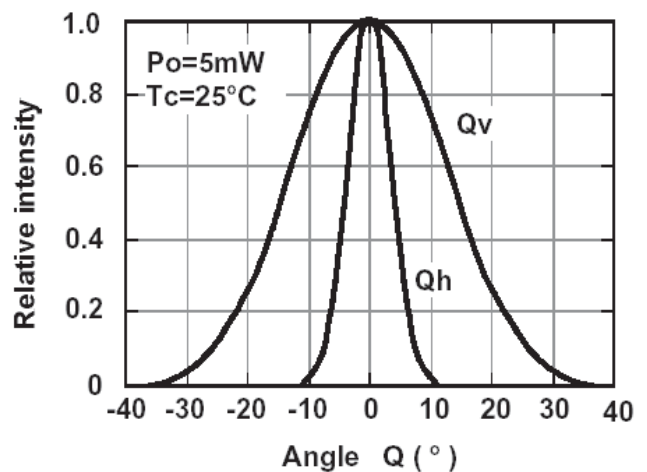
Threshold current vs. Temperature



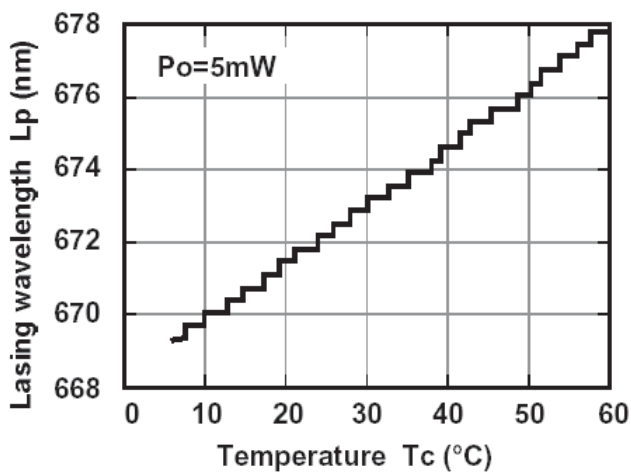
Monitoring current vs. Output power



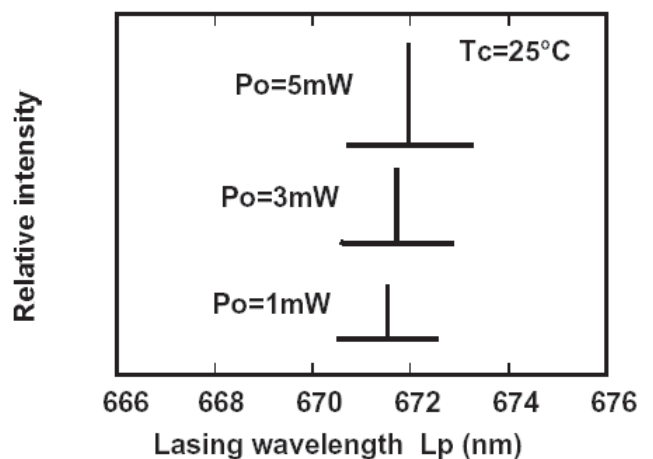
Beam divergence



Lasing wavelength vs. Temperature



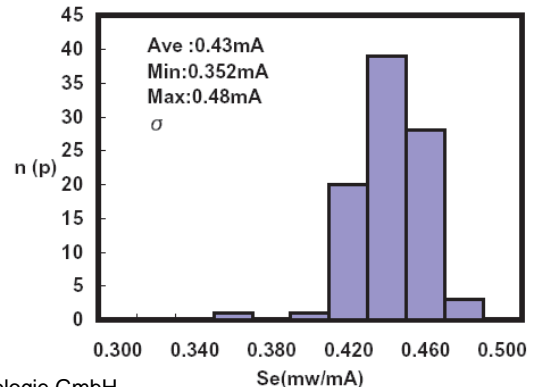
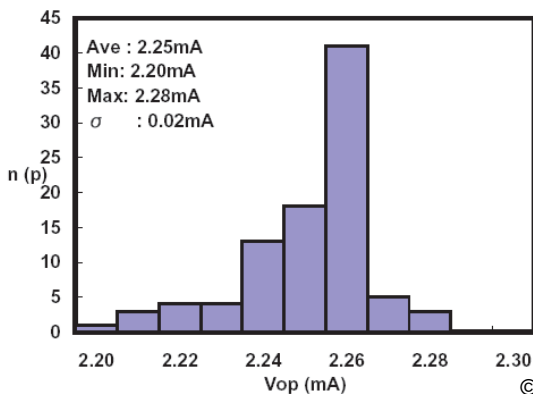
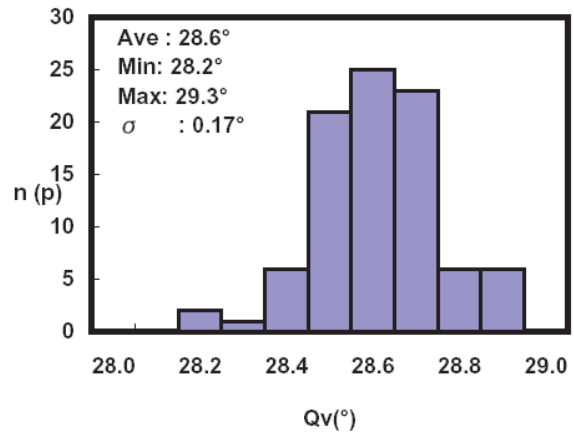
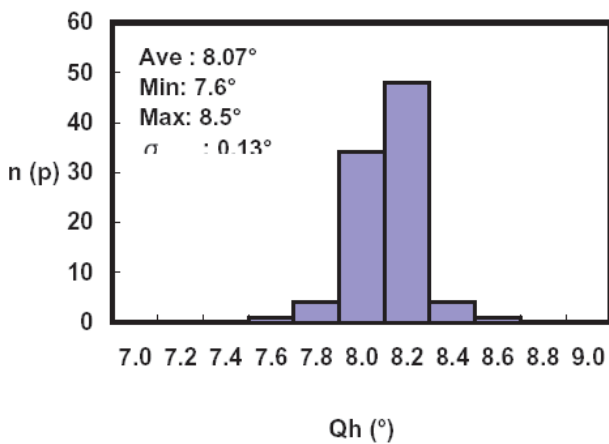
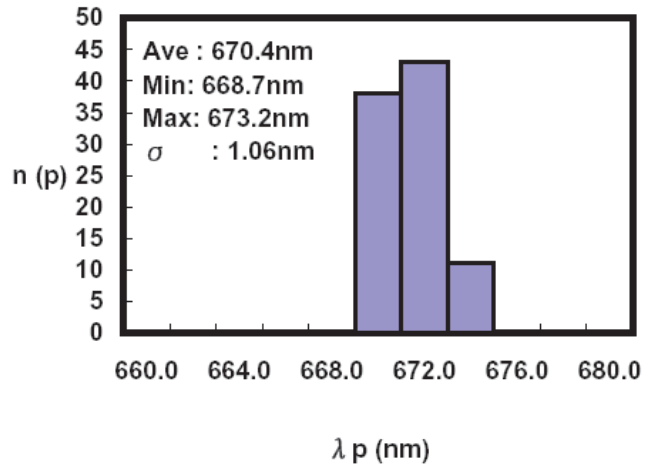
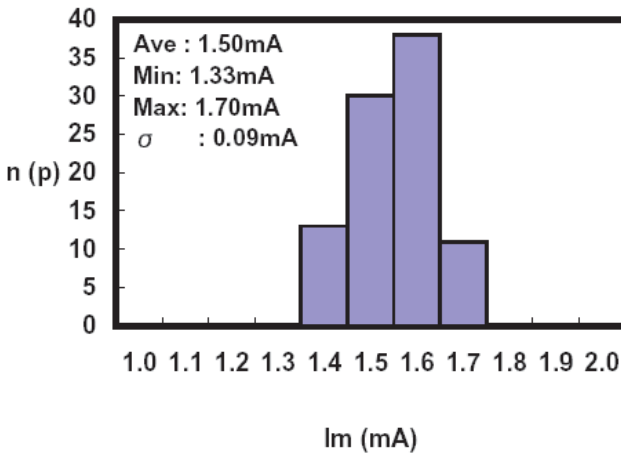
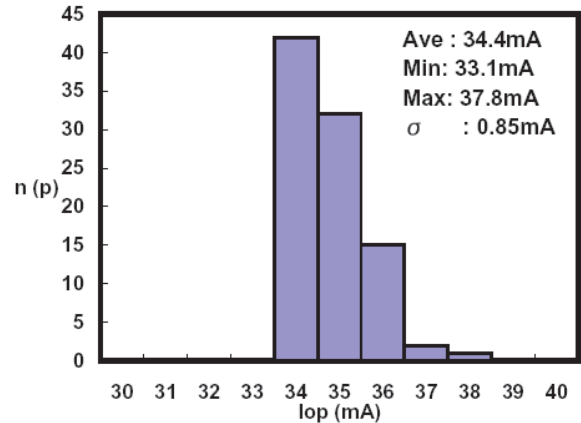
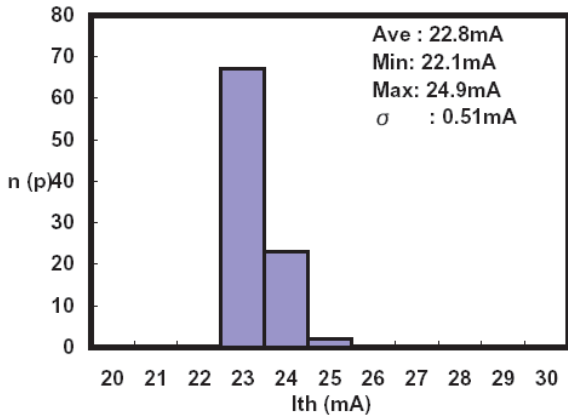
Lasing wavelength vs. Output power



This is typical data and it may not represent all products.

Distribution data

Po = 5mW; n = 92pcs.



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Laserdiode DL-3149-057

This is an example of MTTF data

Judgement: $\text{lop} \times 1,2$
MTTF: 60°C; 5mW; 30000h

