

DL-7140-001S

Wellenlänge: 785nm (typ.)
 Geringer Schwellstrom: 30mA (typ.)
 Max. Ausgangsleistung: 70mW
 Hohe Betriebstemperatur: +60°C
 Kleines 5,6mm Gehäuse

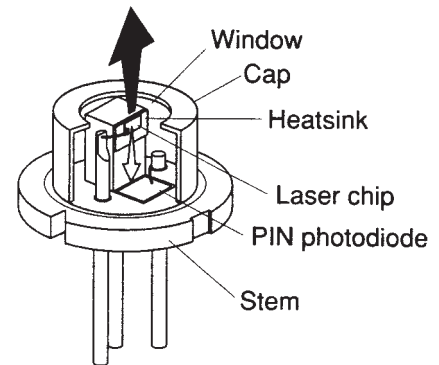


Anwendungsgebiete:
 CD-R
 Analytische Systeme
 Medizinische Anwendungen

Maximalwerte

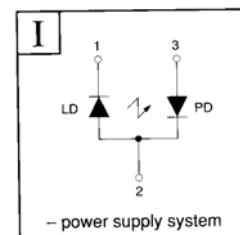
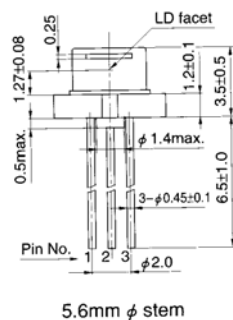
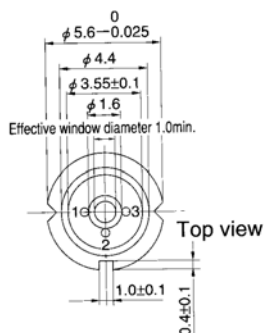
Parameter	Symbol	Wert	Einheit
Ausgangsleistung	CW	Po	80 mW
	Pulse*	Po	85 mW
Sperrspannung	Laser	VR	2 V
	PIN	VR	30 V
Betriebstemperatur	Topr	-10...+60	°C
Lagertemperatur	Tstr	-40...+85	°C

* Pulsbreite: <= 0,5µs; Duty: 50%



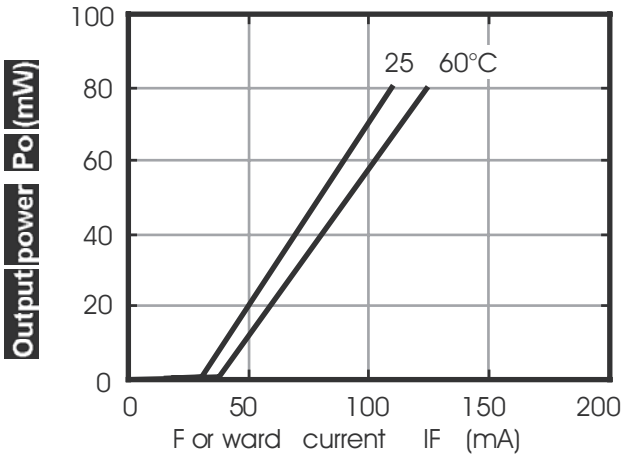
Elektrische und optische Eigenschaften bei 25°C

Parameter	Symbol	Betriebsbedingung	Min.	Typ.	Max.	Einheit	
Schwellstrom	I _{th}	CW	---	30	50	mA	
Betriebsstrom	I _{op}	Po=70mW	---	100	140	mA	
Betriebsspannung	V _{op}	Po=70mW	---	2,0	2,5	V	
Wellenlänge	λ	Po=70mW	780	785	800	nm	
Strahldivergenz	Senkrecht	θ ⊥	---	15	17	20	deg.
	Parallel	θ	---	6	8	10	deg.
Strahlabweichung	Senkrecht	Δ θ ⊥	---	---	+/-3	deg.	
	Parallel	Δ θ	---	---	+/-2	deg.	
Differentieller Wirkungsgrad	dPo/dI _{op}	Po=70mW	0,6	1,0	1,4	mW/mA	
Monitordiodenstrom	I _m	Po=70mW	0,10	0,25	0,6	mA	
Astigmatismus	As	Po=70mW	---	---	10	µm	

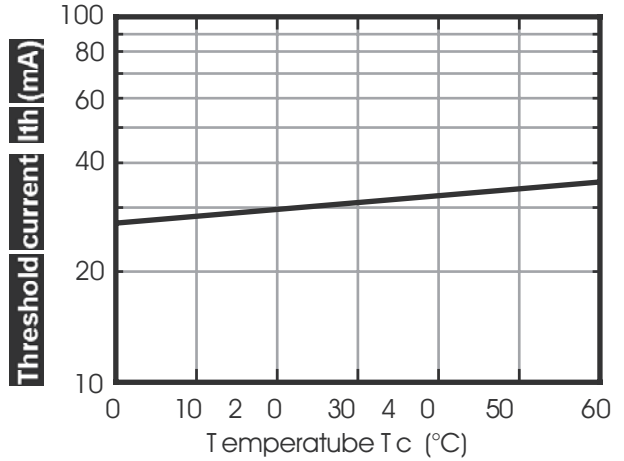


Characteristics

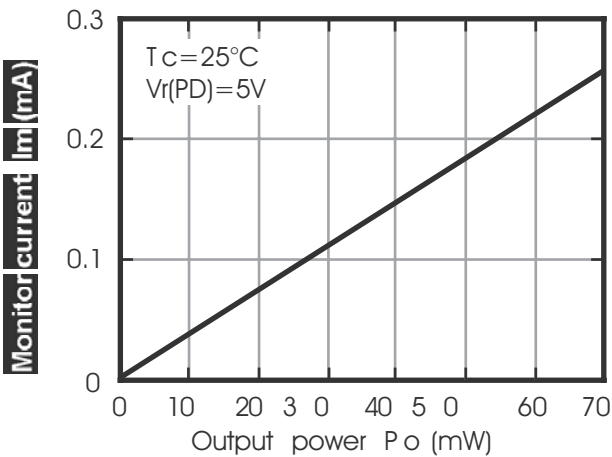
Output power vs. Forward current



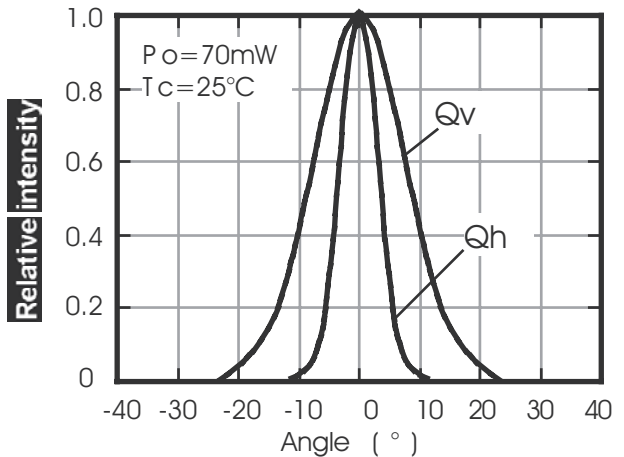
Threshold current vs. Temperature



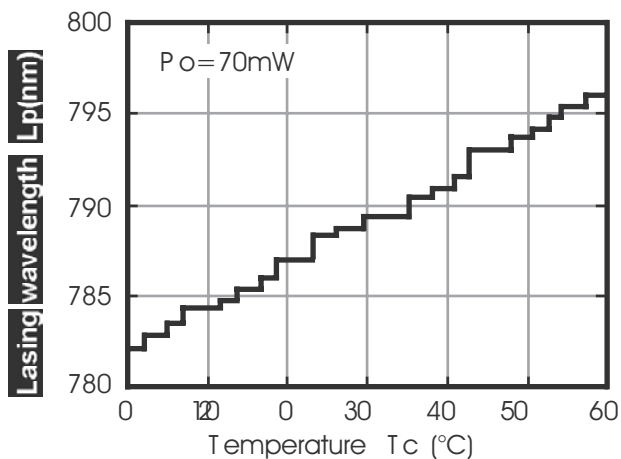
Monitor current vs. Output power



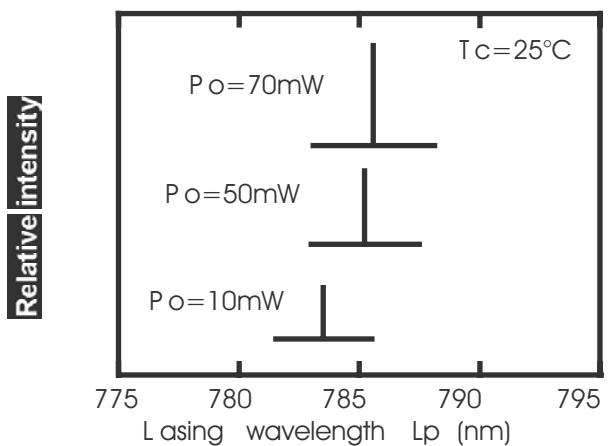
Beamdivergence



Lasing wavelength vs. Temperature



Output power vs. Lasing wavelength



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

Laserdiode DL-7140-001S

