

# Sanyo DL7140-201S

## $\lambda=785\text{nm}$ P=80mW

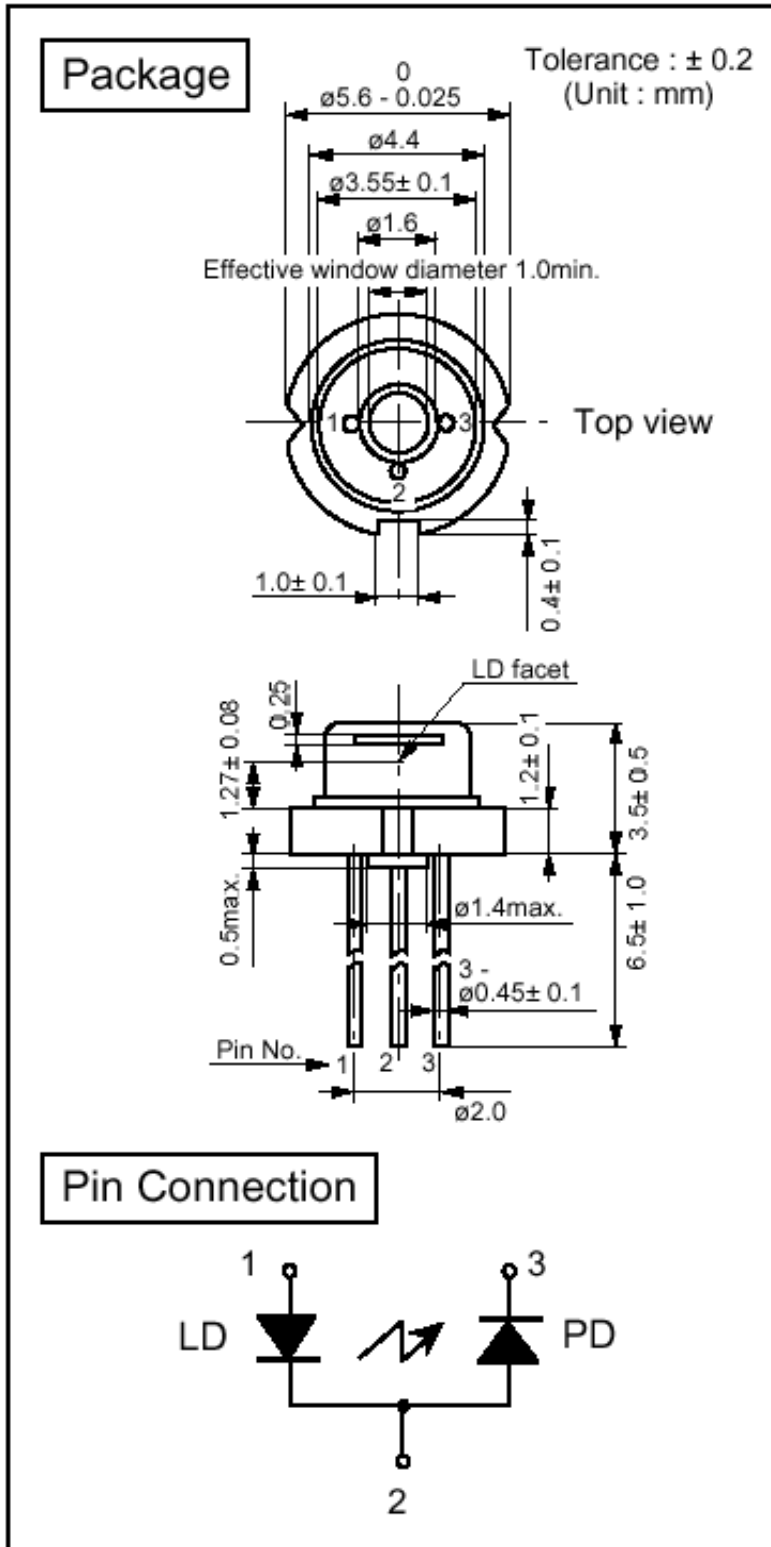
### MAXIMUM RATINGS (Tc=25°C )

CHARACTERISTIC	SYMBOL	RATING
Optical Output Power (CW)	Po	80mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2
PD Reverse Voltage	V <sub>R(PD)</sub>	30
Operation Case Temperature	Topr	-10 to 60°C
Storage Temperature	Tstg	-40 to 85°C

### OPTICAL ELECTRICAL CHARACTERISTICS (Tc=25°C)

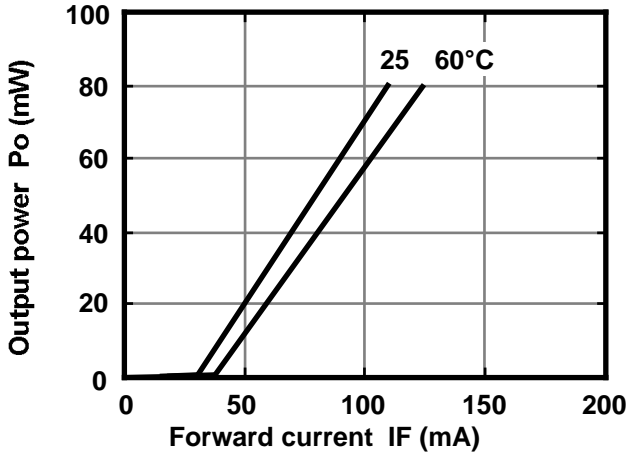
CHARACTERISTIC	SYMBOL	CONDITION	MIN.	TYP.	MAX.
Threshold Current	I <sub>th</sub>		-	30mA	50mA
Operation Current	I <sub>op</sub>	Po=70mW	-	100mA	140mA
Lasing Wavelength	$\lambda_p$	Po=70mW	780nm	785nm	800nm
Beam Divergence (FWHM)	$\theta_{\parallel}$	Po=70mW	5.5°	7.0°	8.0°
Beam Divergence (FWHM)	$\theta_{\perp}$	Po=70mW	15°	17°	20°
Off Axis Angle Perpendicular	$\Delta\theta_{\perp}$	-	-	-	±3°
Off Axis Angle Parallel	$\Delta\theta_{\parallel}$	-	-	-	±3°
Differential Efficiency	dPo/dI <sub>op</sub>	-	0.60	1.00	1.40
Monitor Current	I <sub>m</sub>	Po=70mW	0.1mA	0.25mA	0.60
Astigmatism	A <sub>s</sub>	Po=70mW	-	10	-

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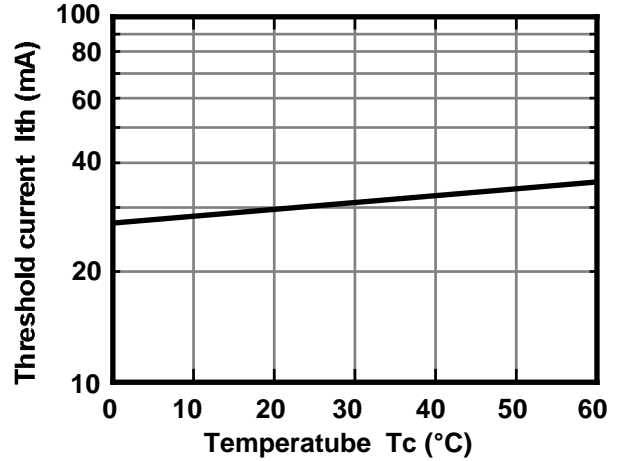


## Characteristics

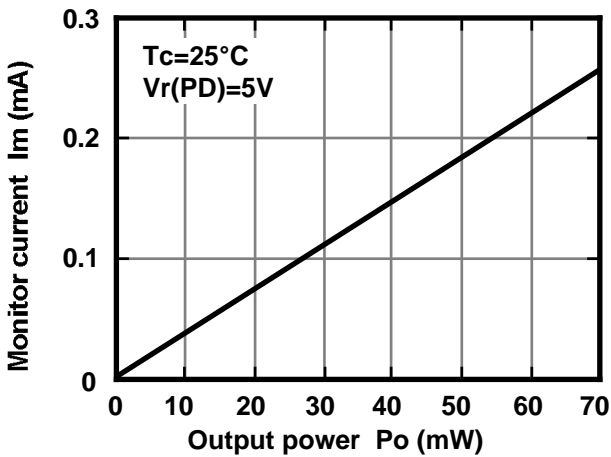
Output power vs. Forward current



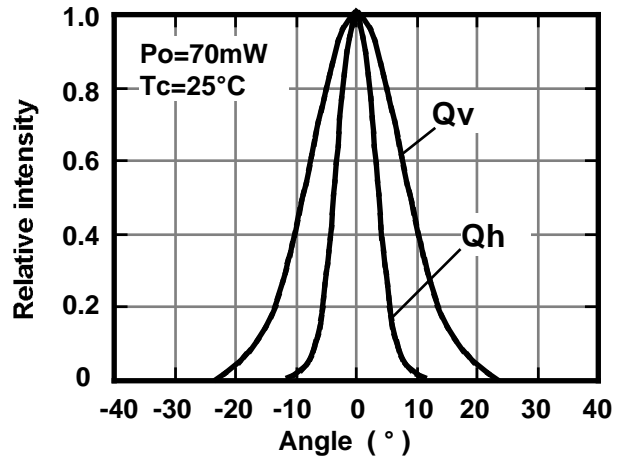
Threshold current vs. Temperature



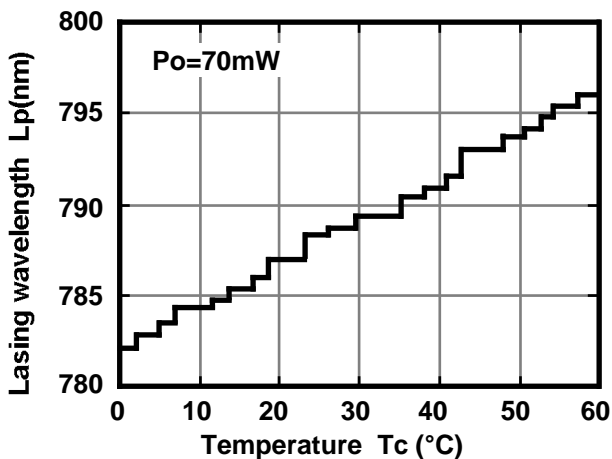
Monitor current vs. Output power



Beam divergence



Lasing wavelength vs. Temperature



Output power vs. Lasing wavelength

