ROITHNER LASERTECHNIK GmbH
WIEDNER HAUPTSTRASSE 76 1040 VIENNA AUSTRIA
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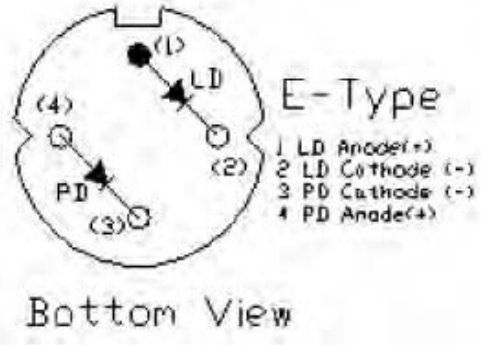
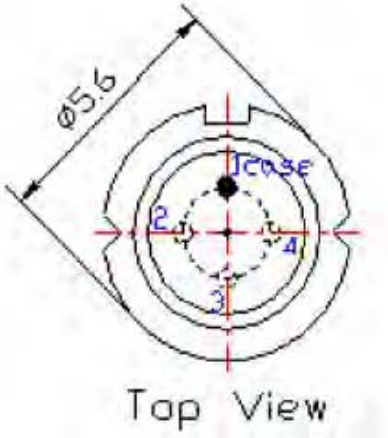
S1300-5MG-BL/FW

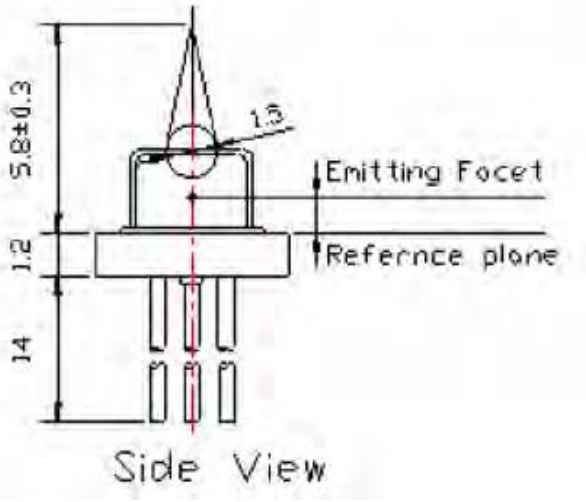
■Features

Un-cooled Laser diode with MQW structure
Wide operation temperature range
Dew point below -40°C
Both ball lens and flat window cap available

■External dimensions (Unit : mm)







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■Absolute Maximum Ratings(Tc=25℃)

Characteristic	Symbol	Rating	Unit
Optical Output Power	Po	7	mW
LD Reverse Voltage	Vr (LD)	2	V
PD Reverse Voltage	Vr (PD)	10	V
Operation Case Temperature	Top	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +125	°C

■Electrical and Optical Characteristics(Tc=25℃)

Characteristic		Symbol	Test Condition	Min.	Typ.	Max.	Unit
Threshhold Current		Ith	Tc = 25°C	-	10	15	mA
Threshhold Current		Ith	Tc =-40 ~ +85°C	-	-	45	mA
Operation Voltage		Vop	Po = 5mW	-	1.2	1.5	V
Slope Efficiency		SE	Po = 1 to 4mW	0.25	0.28	-	mW/mA
Monitor Current (PD)		Im	Po = 5mW, V_{RPD}=2V	0.1	-	-	mA
Dark Current (PD)		Id	V_{RPD}=10V	-	-	0.1	μA
Capacitance (PD)		Ct	V_{RPD}=10V, f=1MHz	-	10	20	pF
Lasing Wavelength		λ	Po = 5mW	1290	1310	1330	nm
Spectral Width		Δλ	Po = 5mW	-	3	5	nm
Optical Output Power		Po	CW, Kink free	5	-	-	nm
P-I Kink		Ki	Po < 5mW	-	-	20	%
Rise and fall time		tr, tf	Po = 5mW, 10%~90%	-	-	0.7	ns
Tracking Error		TE	Po = 5mW, V_{RPD}=1V	-0.7	-	0.7	dB
Beam Divergence (FWHM)	Parallel	θ //	Po = 5mW	-	8	-	deg.
	Perpendicular	θ ⊥	Po = 5mW	-	10	-	deg.

◎ θ // and θ ⊥ are defined as the angle within which the intensity is 50% of the peak value.

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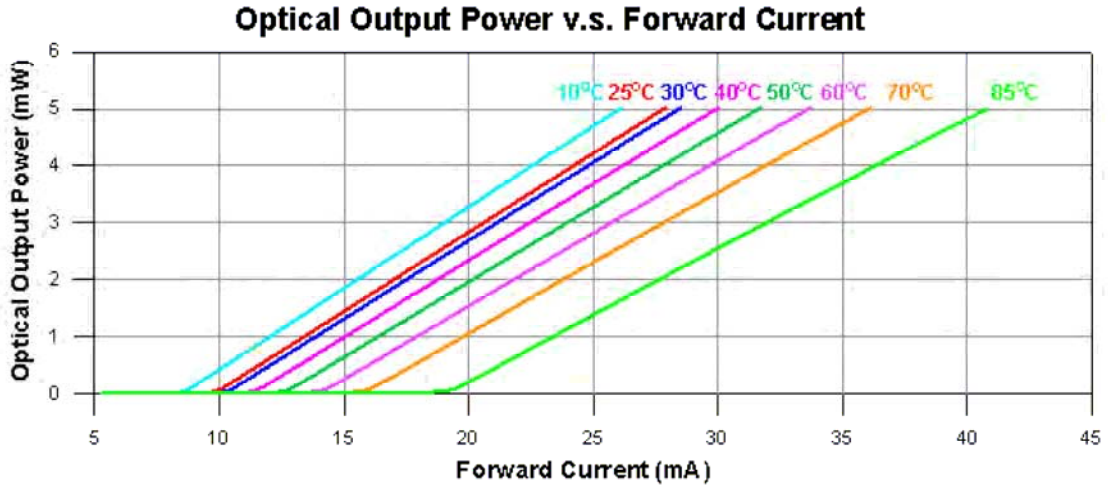
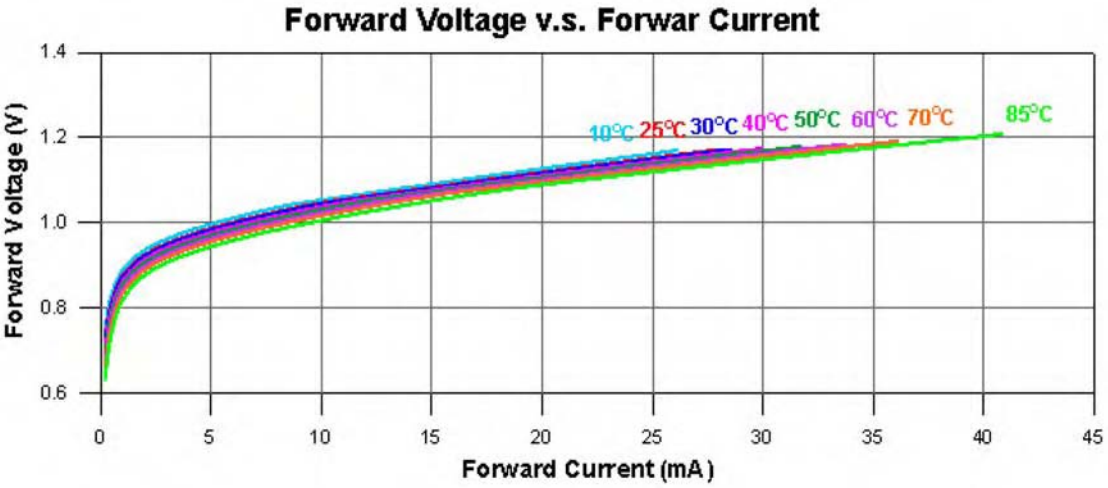
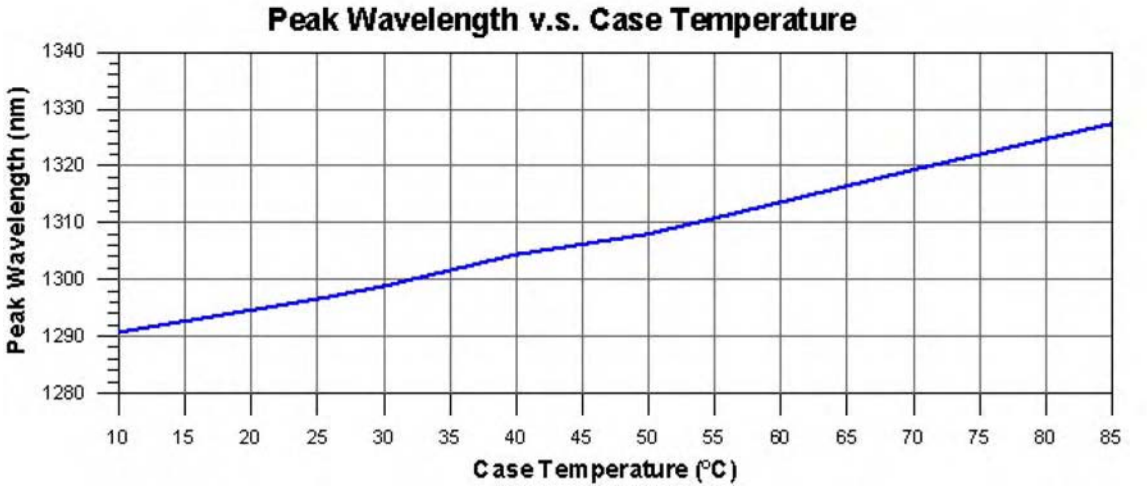
■Typical characteristic curves







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