



## LD980-100-1

### ● Specifications:

Wavelength: 980nm  
 Power: 50mW CW  
 Package: TO18

### ● Absolute Maximum Ratings( $T_c=25^\circ\text{C}$ ):

Parameter		Symbols	Rated	Units
Light Output	CW	$P_o$	100	mW
Reverse Voltage	Laser	$V_r$	2	V
	PD	$V_r(\text{PIN})$	30	V
Operation Temperature		$T_{op}$	-10~+50	$^\circ\text{C}$
Storage Temperature		$T_{stg}$	-40~+80	$^\circ\text{C}$

### ● Electrical and Optical Characteristics( $T_c=25^\circ\text{C}$ ):

Parameter		Symbols	Condition	Min.	Typ.	Max.	Unit
Lasing Wavelength		$\lambda_p$	$P_o=100\text{mW}$	970	980	990	nm
Threshold Current		$I_{th}$	CW	-	35	55	mA
Operating Current		$I_{op}$	$P_o=100\text{mW}$	-	160	180	mA
Operating voltage		$V_{op}$	$P_o=100\text{mW}$	-	1.6	2.1	V
Monitoring Output Current		$I_m$	$P_o=100\text{mW}$ $V_r=0\text{V}$	-	0.2	0.8	mA
Beam Divergence <sup>1)</sup>	Parallel	$\theta_{//}$	$P_o=100\text{mW}$	8	12	14	deg.
	Perpendicular	$\theta_{\perp}$	$P_o=100\text{mW}$	30	35	40	deg.
Slope Efficiency		$\eta$	-	0.5	0.8	-	mW/mA
Emission Point Accuracy		-	$P_o=100\text{mW}$	-80	-	80	$\mu\text{m}$

1) Full angle at half Maximum

