



## PRODUCT DATA SHEET

Laser Diode

Model FB-S1300-30SOT148

Specification	Symbol	Typical	Unit
Laser Emitter			
Peak Wavelength	$\lambda_{op}$	<b>1300±30</b>	nm
CW Optical Output Power	$P_{op}$	<b>30</b>	mW
Operation Current	$I_{op}$	<b>&lt;145</b>	mA
Operation Voltage	$U_{ld}$	<b>1.2±0.2</b>	V
Threshold Current	$I_{th}$	<b>&lt;45</b>	mA
Beam Divergence (FWHM)	$\theta_{  }$	<b>8±2</b>	degree
Beam Divergence (FWHM)	$\theta_{\perp}$	<b>45±5</b>	degree
Spectrum Half-Width (FWHM)	$\Delta\lambda$	<b>&lt;4</b>	nm
Emitting Area	$W \times d$	<b>5x1</b>	$\mu\text{m} \times \mu\text{m}$
Wavelength Temperature Coefficient	$\Delta\lambda/\Delta T$	<b>4±0.5</b>	Å/degree
Operation Power Temperature Coefficient	$\Delta P/\Delta T$	<b>0.15±0.05</b>	mW/degree
Operation Current Temperature Coefficient	$\Delta I/\Delta T$	<b>0.4±0.05</b>	mA/degree
Mode Structure	SM	<b>TE<sub>00</sub></b>	-
Operation Temperature	$T_{op}$	<b>25</b>	degree
Operation Temperature Range		<b>-40... +50</b>	degree
Storage Temperature Range		<b>-40... +80</b>	degree
Operation Mode	CW Pulse	Continuous Wave Pulse, $\tau > 5$ ns	-
Photo Diode Monitor			
Monitor Current		<b>1-1000</b>	$\mu\text{A}$
PD Reverse Voltage		<b>&lt;5</b>	V

*Note: To guarantee reliable operation of laser diode SOT-148 package must be mounted onto copper carrier with TEC (Peltier element) keeping constant temperature.*



Drawings:

