



Laser Diode FJLD-100S-785-TO56-70TX

DESCRIPTION

The **FJLD-100S-785-TO56-70TX** is a 785 nm 100mW quantum well semiconductor laser designed for high output power application. The laser diode is supplied in TO-56 housing with the monitor PD and hermetically sealed with the flat glass cap.

ABSOLUTE MAXIMUM RATING (CW operation, $T_c = 25^\circ\text{C}$)

PARAMETER	SYMBOL	RATING	UNIT
Optical output power	$P_o(\text{CW})$	120	mW
	$P_o(\text{Pulse})^*$	280	mW
LD reverse voltage	V_{RLD}	2	V
PD reverse voltage	V_{RPD}	30	V
Operation temperature	T_c	-10 to 70	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to 85	$^\circ\text{C}$

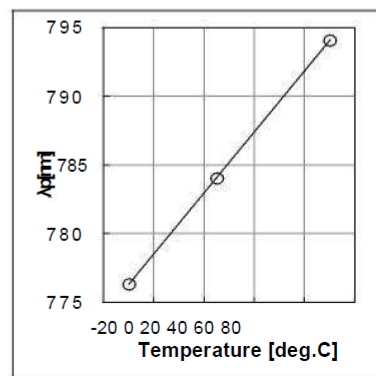
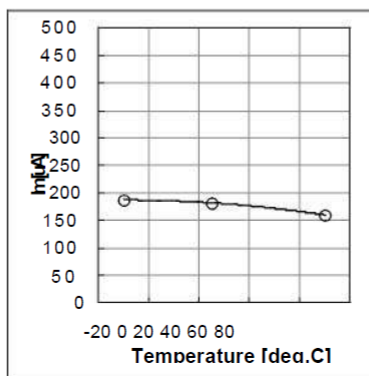
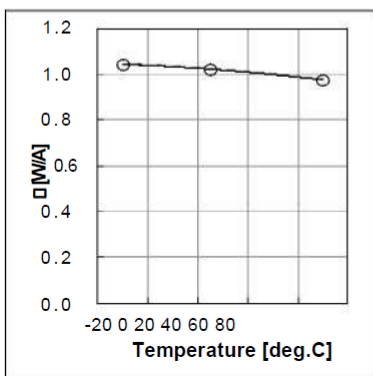
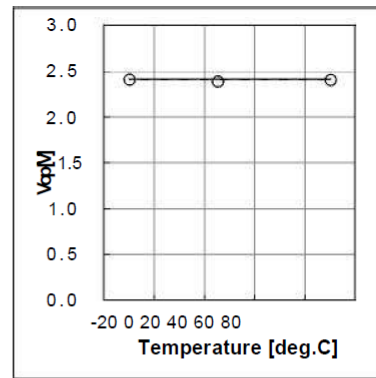
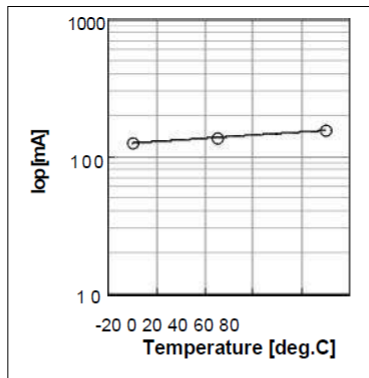
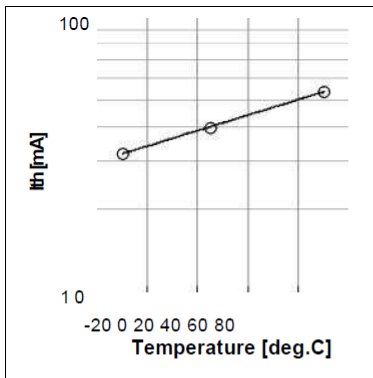
*note : Pulse width < 10nsec, Duty < 0.1%

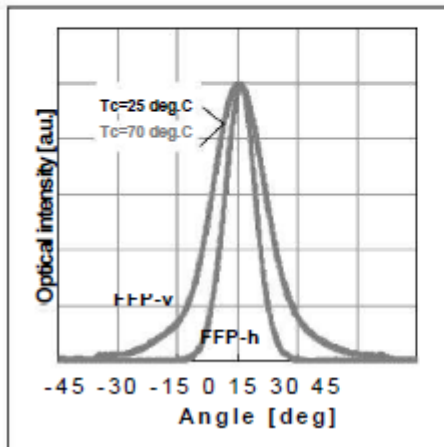
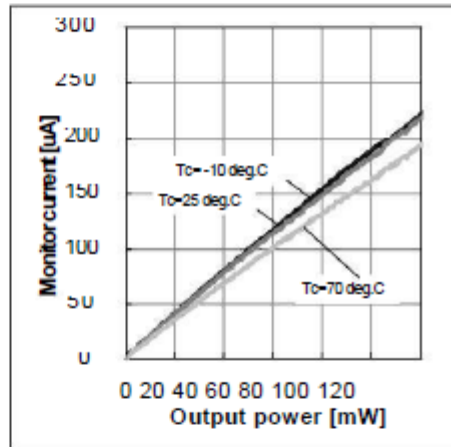
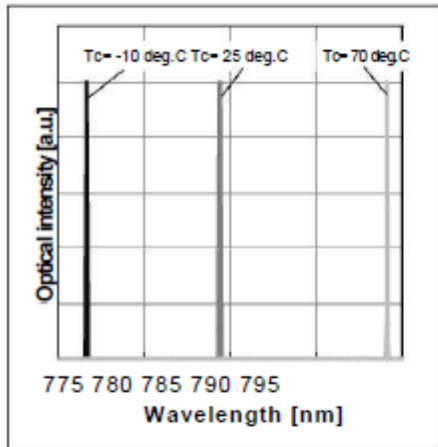
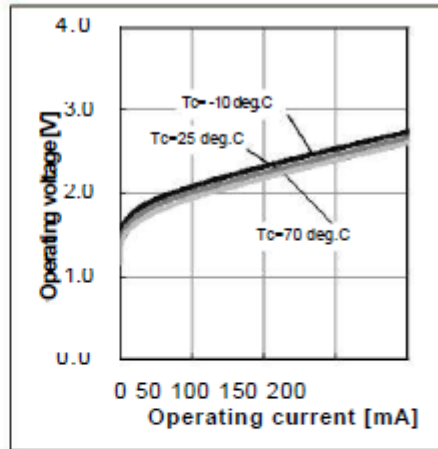
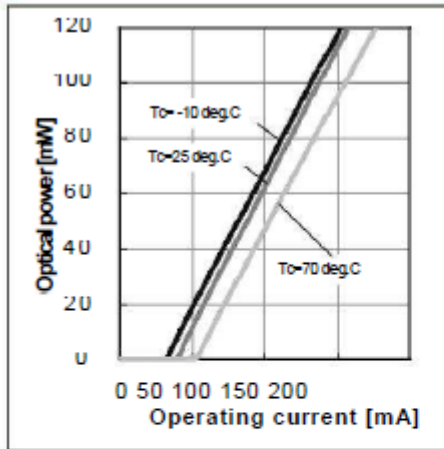
X – electrical contact type (N, P)

OPTICAL AND ELECTRICAL CHARACTERISTICS

($T_c = 25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold current	I_{th}	CW	-	35	55	mA
Operation current	I_{op}	CW, $P_o=100\text{ mW}$	-	135	190	mA
Operation voltage	V_{op}	CW, $P_o=100\text{ mW}$	-	2.3	2.8	V
Slope efficiency	\square	CW, $P_o=5 - 100\text{ mW}$	0.8	1.0	-	W/A
Monitor current	I_m	CW, $P_o=100\text{ mW}$, $V_{RD}=5\text{ V}$	50	190	600	$\square\text{ A}$
Peak wavelength	λ_p	CW, $P_o=100\text{ mW}$	775	783	795	nm
Far field pattern horizontal	θ_h	CW, $P_o=100\text{ mW}$	-	9	-	deg.
Far field pattern vertical	θ_v	CW, $P_o=100\text{ mW}$	-	16	-	deg.





PACKAGE DRAWING

