

■ Electro-optical Characteristics^{*1}

(T_c=25°C)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit	
Threshold current	I _{th}	-	-	55	68	mA	
Operating current	I _{op}	P _o =4mW	-	65	78	mA	
Operating voltage	V _{op}	P _o =4mW	-	2.4	2.95	V	
Wavelength	λ _p	P _o =4mW	648	654	660	nm	
*2 Half intensity angle	Parallel	θ//	P _o =4mW	7	9	11	°
	Perpendicular	θ⊥	P _o =4mW	32	35	38	°
*4 Ripple	R _i	P _o =4mW	-20	-	+20	%	
Misalignment angle	*2*3 Parallel	Δθ//	P _o =4mW	-2	-	+2	°
	*2*3 Perpendicular	Δθ⊥	P _o =4mW	-3	-	+3	°
Interference pattern intensity	α	P _o =4mW	-	-	0.5	-	
Differential efficiency	η _d	$\frac{2mW}{I(4mW) - I(2mW)}$	0.2	0.45	0.85	mW/mA	

*1 Initial value, CW (Continuous Wave) drive

*2 Angle at 50% peak intensity (full-width at half-maximum)

*3 Parallel to the junction plane (X-Z plane), Perpendicular to the junction plane (Y-Z plane)

*4 R_i=ΔP/P ΔP : the maximum deviation of the far field pattern from its approximate curve P : the peak of the approximate curve

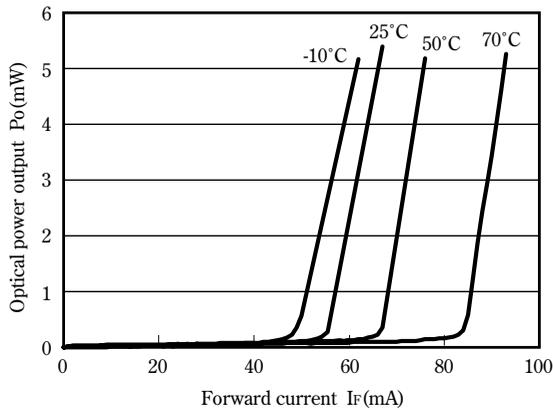
■ Electrical Characteristics of Photodiode

(T_c=25°C)

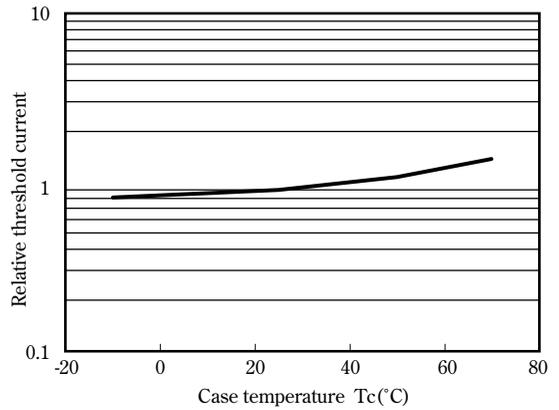
Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Output current	I _m	P _o =4mW, V _{rd} =5V	0.2	0.4	1.0	mA
Dark current	I _D	V _{rd} =5V	-	-	150	nA
Terminal capacitance	C _t	V _{rd} =5V, f=1MHz	-	3.5	-	pF

• Please refer to the chapter "Handling Precautions"

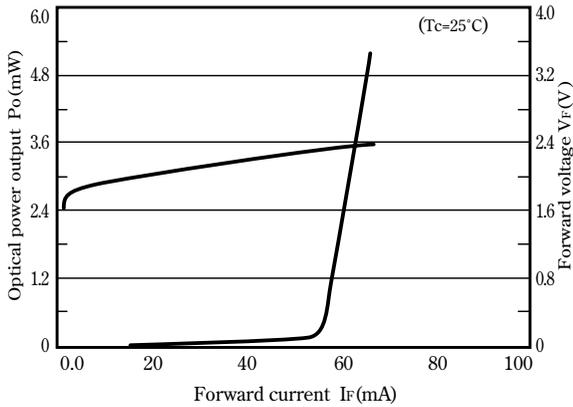
Optical power output - Forward current



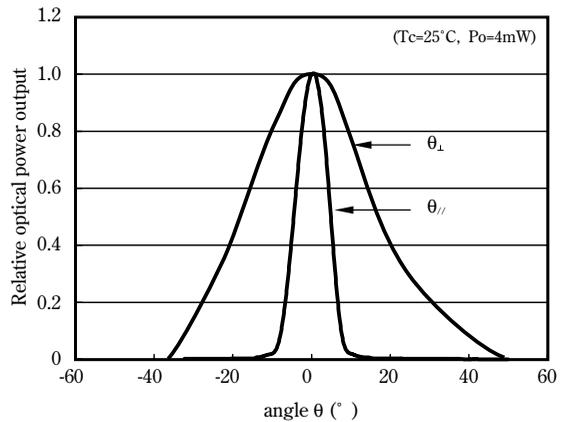
Case temperature dependence of threshold current



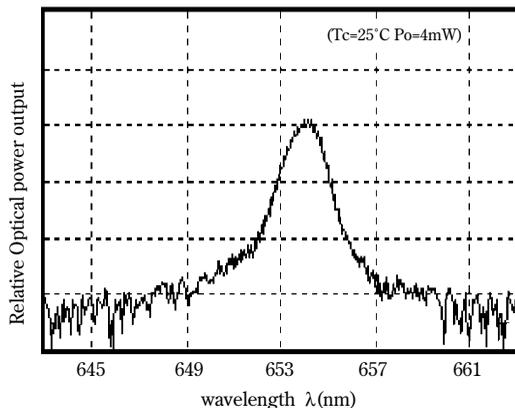
Forward voltage - Forward current
Optical power output - Forward current



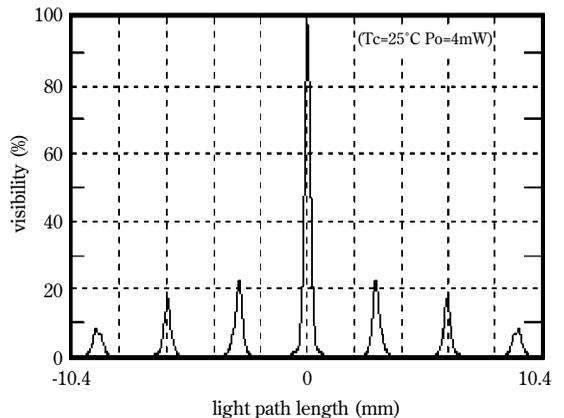
Far field pattern (FFP)



Lasing spectrum



Visibility



Note) Characteristics shown in diagrams are typical values. (not assurance value)

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