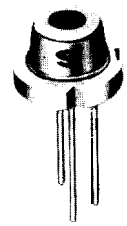
LTO28PS

Features

. Small astigmatic distance (less than 10 μm)
. Low droop rate (10% TYP.)
. Wavelength: 780nm
. Single transverse mode

Applications

. General purpose laser printers
. Information processing equipment



Absolute Maximum Ratings

(Tc=25°C)

Parameter		Symbol	Ratings	Units
wer output		Po	5	mW
oltage	Laser	V_R	2	V
	PIN		30	
temperature *1		Topr	−10 to +60	°C
Storage temperature *1		Tstg	−40 to +85	°C

* 1 Case temperature

Electro-optical Characteristics *'

(Tc=25°C)

Parameter			Symbol	condition	Ratings MIN	Ratings TYP	Ratings MAX	Units
Threshold current			Ith		—	3 5	50	mA
Operating current			Iop	Po=3mW		45	60	mA
Operating voltage			V o p	P o = 3 m W	—	1 75	2.2	V
Wavelength*'			λp i	Po=3mW	770	780	795	nm
Monitor current			Im	Po=3mW V_R=15V	0.04	0.10	0.30	mA
Radiation characteristics	Angle *3	Parallel to junction	θ //	Po=3mW	8	11	14	deg
		Perpendicular to junction	$\theta\perp$	Po=3mW	20	29	36	deg
	Ripple			Po=3mW		—	±35	%
Emission point accuracy	Angle		$\Delta\phi$ //	Po=3mW	_	—"	±2	deg
			$\Delta\phi\perp$	Po=3mW			±3	deg
	Position		Δx, Δy, Δz		—	—	±800	μm
Differential efficiency			η	2mW / I_F(3mW)−I_F(1mW)	0 2	0.3	0.4	mW/mA
Astigmatic distance"			A A s	Po=3mW			10	μm
Droop rate * 5			ΔP	Po=3mW		10		%

* 1 Initial value
* 2 Single transverse mode
* 3 Angle at 50% peak intensity (full width at half-maximum)
* 4 According to measurement method Fig. 27-1
* 5 According to measurement method Fig. 29-1

Electrical Characteristics of Photodiode

(Tc=25°C)

Parameter	Symbol	Condition	Ratings MIN	Ratings TYP	Ratings MAX	Units
Sensitivity	S	V_R=15V		0.03		mA/mW
Dark current	I_D	V_R=15V	—	—	150	nA
Terminal capacitance	Ct	V_R=15V	—	9	—	pF