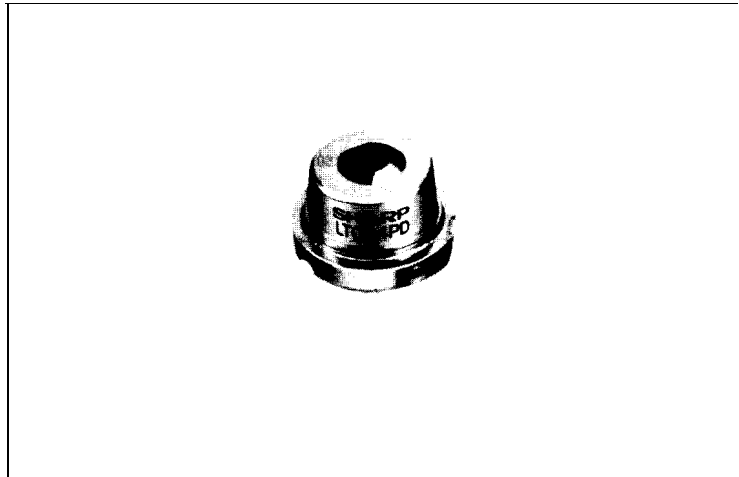


**Features**

- High power (maximum optical power output: 30 mW)
- Wavelength: 780nm
- Single transverse mode

**Applications**

- Optical disk memories
- Information processing equipment



**Absolute Maximum Ratings**

(Tc = 25°C)

Parameter	Symbol	Ratings	Units
Optical power output	Po	30	mW
Reverse voltage	V <sub>R</sub>	30	V
Operating temperature*	T <sub>opr</sub>	-10 to +50	°C
Storage temperature**	T <sub>stg</sub>	-40 to +85	°C

\* 1 Case temperature

**Electro-optical Characteristics \*\***

Tc=25°C

Parameter	Symbol	Condition	Rating			Units
			MIN	TYP	MAX	
Threshold current	I <sub>th</sub>			55	80	mA
Operating current	I <sub>op</sub>	Po = 20mW		85	120	mA
Operating voltage	V <sub>op</sub>	Po = 20mW		1.85	2.2	v <sub>-</sub>
Wavelength *2	λ <sub>p</sub>	Po = 20mW	765	780	795	nm
Monitor current	I <sub>m</sub>	Po = 20mW V <sub>R</sub> = 15V	25	80	250	μA
Radiation characteristics	Angle *3	Parallel to junction	8	10	14	deg
		Perpendicular to junction	20	29	38	deg
Ripple		Po = 20mW			±20	%
Emission point accuracy	Angle	Po = 20mW			±2	deg
		Po = 20mW			±3	deg
Differential efficiency	Position				±80	μm
			10mW	0.5	0.75	1.1

\* 1 Initial value

\* 3 Angle at 50% peak intensity (full width at half-maximum)

\* 2 Single transverse mode

**Electrical Characteristics of Photodiode**

(Tc = 25°C)

Parameter	Symbol	Condition	Ratings			Units
			MIN	TYP	MAX	
Sensitivity	S	V <sub>R</sub> = 15V		4		μA/mW
Dark current	I <sub>D</sub>	V <sub>R</sub> = 15V			150	nA
Terminal capacitance	C <sub>t</sub>	V <sub>R</sub> = 15V		18	20	pF