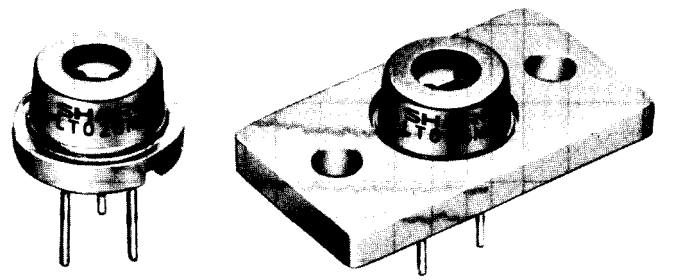
LT026MD/MF

Features

- Small astigmatic distance (less than 10 μm)
- Wavelength: 780nm
- Single transverse mode

Applications

- General purpose laser printers
- Information processing equipment



Absolute Maximum Ratings

(Tc=25°C)

Parameter		Symbol	Ratings	Units
Optical power output		Po	5	mW
Reverse voltage	Laser	V_R	2	V
	PIN		30	
Operating 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		—	50	80	mA
Operating current			Iop	Po=3mW	—	65	100	mA
Operating voltage			Vop	Po=3mW	—	1.75	2.2	V
Wavelength *2			λp	Po=3mW	770	780	790	nm
Monitor current			Im	Po=3mW, V_R=15V	0.3	0.9	1.6	mA
Radiation characteristics	Angle *3	Parallel to junction	θ//	Po=3mW	8	11	16	deg
		Perpendicular to junction	θ⊥	Po=3mW	20	29	36	deg
	Ripple			Po=3mW	—	—	±20	%
Emission point accuracy	Angle		Δφ //	Po=3mW	—	—	±2	deg
			Δφ ⊥	Po=3mW	—	—	±3	deg
	Position *4		Δx, Δy, Δz		—	—	±80	μm
Differential efficiency			η	2mW / I_F(3mW) − I_F(1mW)	0.2	0.3	0.5	mW/mA

* 1 Initial value
* 2 Single transverse mode
* 3 Angle at 50% peak Intensity (full width al half-maximum)
* 4 Not specified for LT026MF

Electrical Characteristics of Photodiode

(Tc=25°C)

Parameter	Symbol	Condition	Ratings MIN	Ratings TYP	Ratings MAX	Units
Sensitivity	S	V_R=15V	—	0.3	—	mA/mW
Dark current	I_D	V_R=15V	—	—	250	nA
Terminal capacitance	Ct	V_R=15V	—	8	20	pF