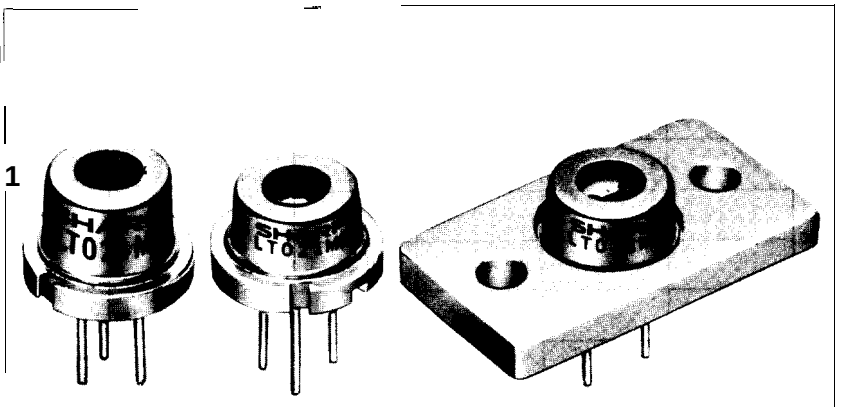
LT021MC/MD/MF

Features

- High power (maximum optical power output: 15 mW)
- Wavelength: 780nm
- Sinale transverse mode

Applications

- High speed laser printers
- Bar code readers
- Information processing equipment



Absolute Maximum Ratings

(Tc = 25°C

Parameter		Symbol	Ratings	Units
Optical power output		Po	15	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 *1

(Tc=25°C)

Parameter		Symbol	Condition	Ratings MIN	TYP	MAX	Unite
Threshold current		Ith	—	—	45	80	mA
Operating current		Iop	Po=10mW	—	75	110	mA
Operating voltage		Vop	Po=10mW	—	1.8	2.5	-v
Wavelength *1		λp	Po=10mW	770	780	790	nm
Monitor current		Im	Po=10mW, V_R=15V	1.0	30	5.0	mA
Radiation angles *3	Parallel to junction	θ//	Po=10mW	8	11	16	deg
	Perpendicular to junction	θ⊥	Po=10mW	20	33	45	deg
Emission point accuracy	Angle	Δφ//	Po=10mW	—		±2	deg
		Δφ⊥	Po=10mW	—		±3	deg
	Position *4	Δx, Δy, Δz	—	—		±80	μm

* 1Initial value
* 2 single transverse mode
* 3 Angle at 50% peak intensity (full width at half-maximum)
* 4 Not specified for LT021MF

Electrical Characteristics of Photodiode

(Tc=25°C)

Parameter	Symbol	Condition	Ratings MIN	TYP	MAX	Units
Sensitivity	S	V_R=15V		0.3		mA/mW
Dark current	I_D	V_R=15V	—	—	150	nA
Terminal capacitance	Ct	V_R=15V	—	8	—	pF