

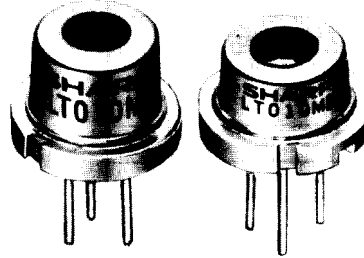
LT010MC/MD

Features

- Wavelength 810nm
- Single transverse mode

Applications

- Measurement instruments
- Short-distance communications
- Information Processing equipment



Absolute Maximum Ratings

Parameter	Symbol	Ratings	Units
Optical power output	P _o	5	mW
Reverse voltage	V _R	2	V
Operating temperature*1	T _{opr}	-10 to +60	°C
Storage temperature*1	T _{stg}	-40 to +85	°C

*1 Case temperature

Electro-optical Characteristics**

Parameter	Symbol	Condition	Ratings			Units
			MIN	TYP	MAX	
Threshold current	I _{th}			50	80	mA
Operating current	I _{op}	P _o =3mW		65	100	mA
Operating voltage	V _{op}	P _o =3mW		1.75	2.2	V
Wavelength*	λ _D	P _o =3mW	800	810	820	nm
Monitor current	I _m	V _R =15V	0.2	0.9	2.0	mA
Radiation Angle**	Parallel to junction	P _o =3mW	8	11	16	deg
	Perpendicular to junction	P _o =3mW	20	33	45	deg
Emission point accuracy	Angle	P _o =3mW			±2	deg
	Position	P _o =3mW			±3	deg
	Δx, Δy, Δz				±80	μm

*1 Initial value

*2 Single transverse mode

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

Electrical Characteristics of Photodiode

Parameter	Symbol	Condition	Ratings			Units
			MIN	TYP	MAX	
Sensitivity	S	V _R =15V		0.3		mA/mW
Dark current	I _D	V _R =15V			250	nA
Terminal capacitance	C _t	V _R =15V		8	20	pF