

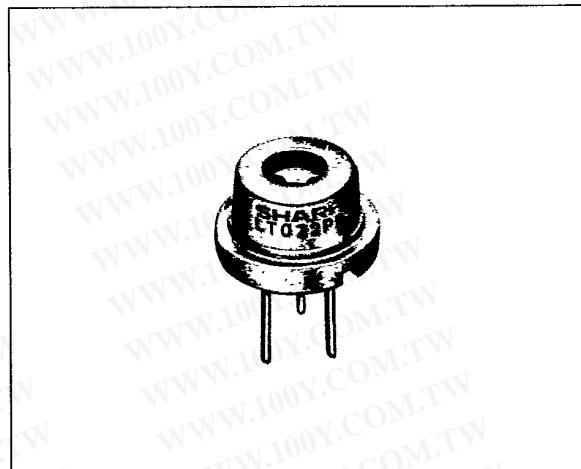
LT022PD**Features**

- Uses single positive power supply drive
- Low noise S/N: 60 dB (according to measurement method Fig. 29-2)
- Wavelength: 780nm
- Single transverse mode

Applications

- CD players
- CD-ROMs
- Information processing equipment

勝特力材料 886-3-5753170
 胜特力电子(上海) 86-21-34970699
 胜特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

**Absolute Maximum Ratings**

Parameter		Symbol	Ratings	(Tc=25°C)
Optical power output	Po	5	mW	
Reverse voltage	V _R	2	V	
Laser PIN		30		
Operating temperature *1	To _{pr}	-10 ~ +60	°C	
Storage temperature *1	T _{stg}	-40 ~ +85	°C	
Soldering temperature *2	T _{sol}	260 (less than 5 seconds)	°C	

*1 Case temperature *2 At point 1.6 mm from lead base

Electro-optical Characteristics *1

Parameter		Symbol	Condition	Ratings			Units	
				MIN	TYP	MAX		
Threshold current	I _{th}	—	—	50	80	—	mA	
Operating current	I _{op}	Po=3mW	—	65	100	—	mA	
Operating voltage	V _{op}	Po=3mW	—	1.75	2.2	—	V	
Wavelength *2	λ _p	Po=3mW	770	780	795	—	nm	
Monitor current	I _m	Po=3mW V _R =15V	—	0.4	—	—	mA	
Radiation characteristics	Angle *3	Parallel to junction	θ //	Po=3mW	8.5	11	16	deg
		Perpendicular to junction	θ ⊥	Po=3mW	25	35	48	deg
Emission point accuracy	Ripple		—	Po=3mW	—	—	±20	%
	Angle		Δφ //	Po=3mW	—	—	±2	deg
	Position		Δφ ⊥	Po=3mW	—	—	±3	deg
	Position		Δx, Δy, Δz	—	—	—	±80	μm
Differential efficiency	η	2mW I _F (3mW) - I _F (1mW)	0.1	0.25	0.6	—	mW/mA	

*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	—	0.13	—	mA/mW
Dark current	I _D	V _R =15V	—	—	150	nA
Terminal capacitance	C _t	V _R =15V	—	18	—	pF