

Four Quadrant Detector

The device is an n-type four quadrant detector, which is biased in the reverse direction. Operating under set conditions, the spectral response range is from visible light to Near infrared, peak response wavelength 980nm, High response at 1064nm.

Features

Low dark current

High responsiveness

Good quadrant consistency

Small blind area



Application

Laser aiming, guidance, tracking and exploration device

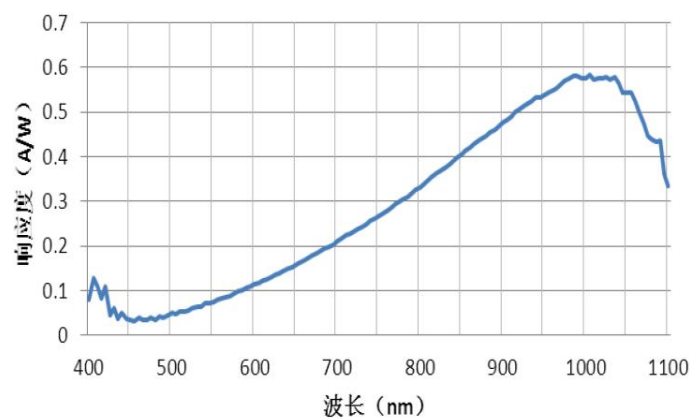
Laser micro positioning

Displacement monitoring and other precision measurement systems

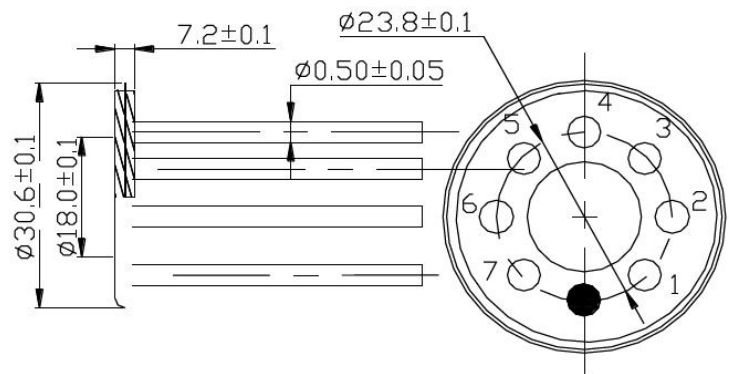
Optical & electrical characteristics(T=25°C)

Parameter	Value	Unit
Package type	MBCY031-W7W	
Active area	Φ14	mm
Detection range	400~1100	nm
Peak response wavelength	980	nm
Idark(VR=50V)	50	nA
Rise time(1064nm,VR=100V,RL=50Ω)	16	ns
capacitance (VR=50V,f=1MHz)	15	pF
Breaking Voltage	250	V
Saturated optical power	0.3	W/cm ²
Maximum operating voltage	100	V
Operating temperature	-40~+85	°C
Storage temperature	-55~+100	°C

Spectral response curve



Dimensions Diagram & PIN assignment



PIN	FUNTION	Voltage polarity
1	Quadrant 1	-
2	Common N	+
3	Quadrant 2	-
4	RING	-
5	Quadrant 3	-
6	CASE	-
7	Quadrant 4	-

Note: it is top view

Application circuit

