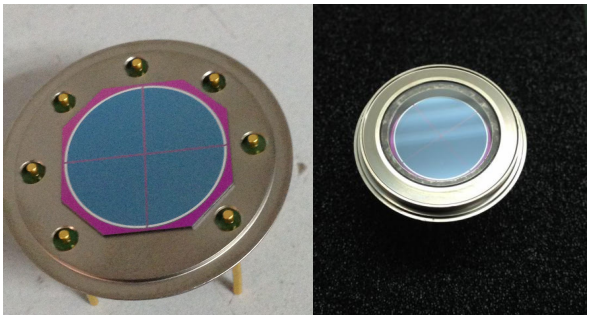
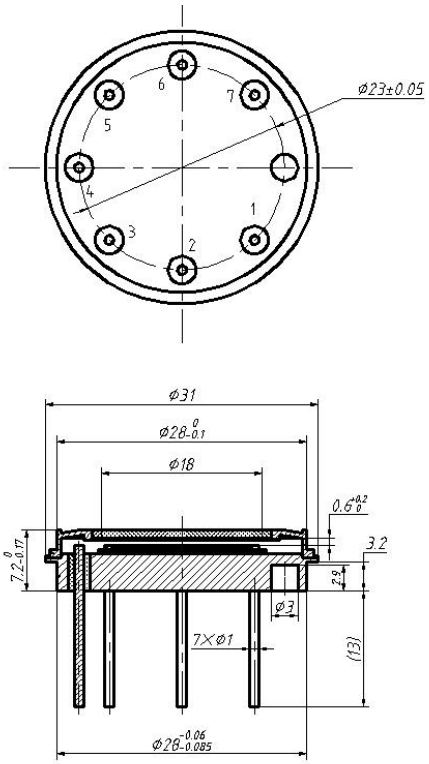
OSQ14-YT

SILCON QUADRANT PHOTODIODE





PIN1,2,5,7 : Anode 1~4

PIN3 : Common Cathode

PIN4,6 : NC

NOTES:

All dimension are in millimeters.

Description

Φ14mm diameter low dark current, large active area chip size quadrant photodiode with P on N construction and 200um gaps.

Features

* Small gap
* Low dark current
* Operating temperature is from -40 to +80℃
* Storage temperature is from -40 to +100℃
* soldering temperature is 260℃ @Max.5 seconds at the position of 2mm from the PIN legs.

General Ratings

* Type Silicon Photodiode
* High linearity
* Low dark current

Applications

* Laser beam position sensor
* Autocollimators
* Optical tweezers
* Ellipsometers

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Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Chip size	S			17.4*17.4		mm^2
Active area	A			Φ14		mm
Gap	Dia		Φ0.1		Φ7	mm
Dark current	I_D	VR=100V		20	50	nA
		VR=200V			100	
Rise time	t_R	V_R=50V;λ=1064nm;R_L=50Ω		15	20	ns
Temp coefficient of I_D	T_{CID}			0.18		times/℃
Reverse breakdown voltage	$V_{(BR)R}$	I_R=2μA Ev=0lx	250			V
Junction Capacitance	C_J	V_R=0V f=1MHz		166		pF
		V_R=50V f=1MHz		16	20	
CrossTalk Channel-to-Channel	S_L	V_R=100V，Adjacent Channel		2.5		%
		V_R=200V，Adjacent Channels		5		
Uniformity of each Element	%			3	8	%
Photo sensitivity	S_R	650nm		0.38		A/W
		1064nm		0.45		
Spectral Application Range	λ_{range}		400		1100	nm
Spectral Response-Peak	λ_p			1064		nm

■ Spectral response