

Si PIN Large Sensitive Photo Diode IP-Si 103

Characteristics:

Large Sensitive Area
 High Uniformity
 High Responsivity
 High Linearity



Applications:

Low Intensity Light detector

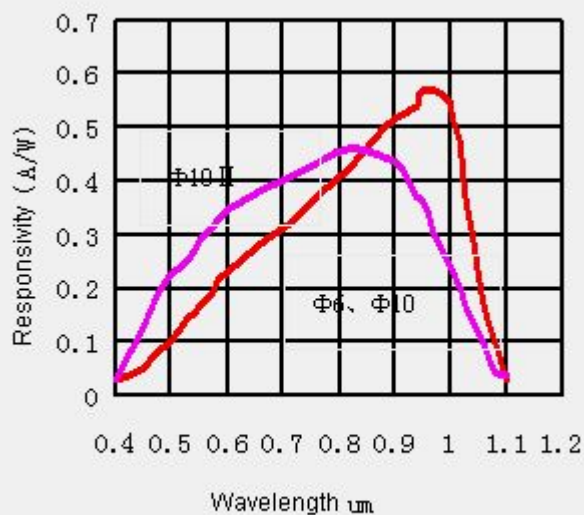
Mechanism

The large area, high sensitivity and high efficiency OE detector can be used in low optical intensity detection. The device can work under 0 voltage bias condition, equivalent as a photo cell.

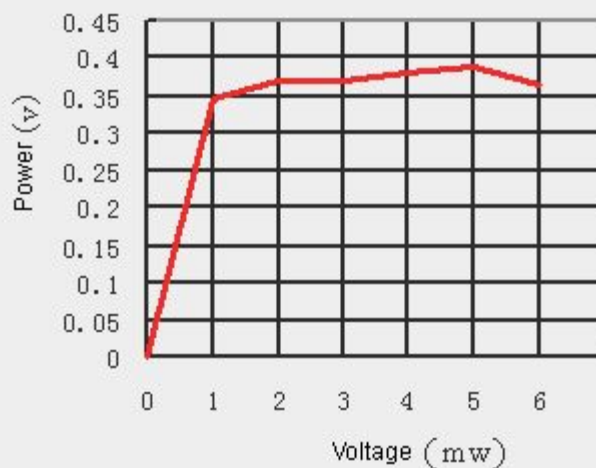
Technical Parameter (Ta=23℃)

Parameter		Symbol	Test Conditions	Typical Value			Unit
Active Area		Φ		6	10	10 II	μm
Optical	Spectrum Response Range	λ		400-1100			nm
	Responsivity	R_e	$V_R=0\text{V}$ $\lambda=900\text{nm}$	0.5		0.43	A/W
			$V_R=0\text{V}$ $\lambda=6328\text{nm}$	0.25		0.35	
	Response Time	t_r	$V_R=0\text{V}$	0.3	2		μs
Electrical	Dark Current	I_D	$V_R=0\text{V}$	30	150	150	nA
	Reverse Break Down Voltage	V_{BR}	$I_R=10\mu\text{A}$	50	30		V
	Capacitance	C_j	$f=1\text{MHz}$ $V_R=0\text{V}$	200	700	1500	pF
Operating Voltage		V_R		0			V
Package			Q9 Coaxial				
Saturation Power							

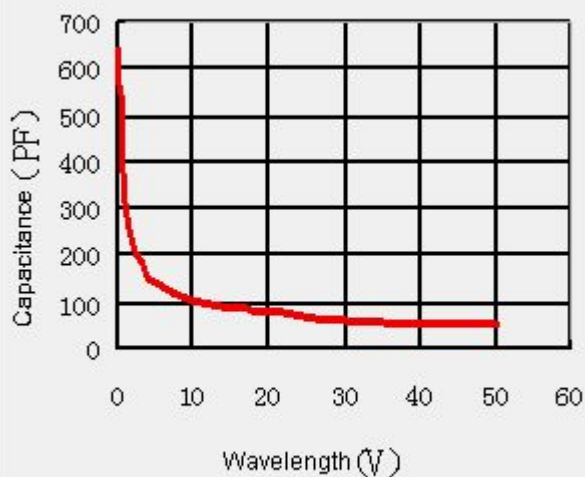
Typical Operating Characteristics



Spectrum Response Curve



Incident Light Power VS. Opent Circuit Voltage



Capacitance VS. voltage

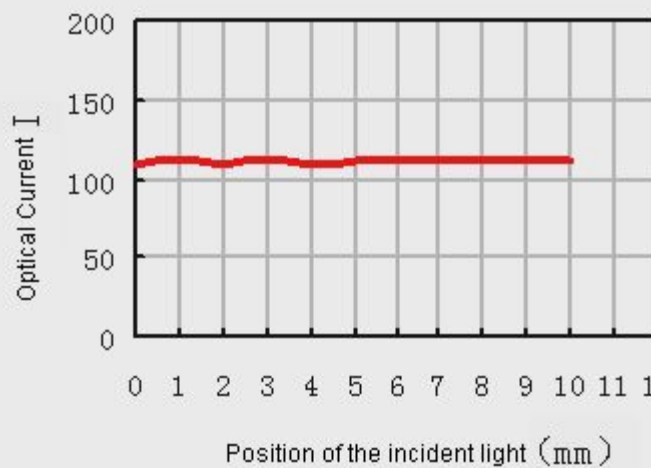
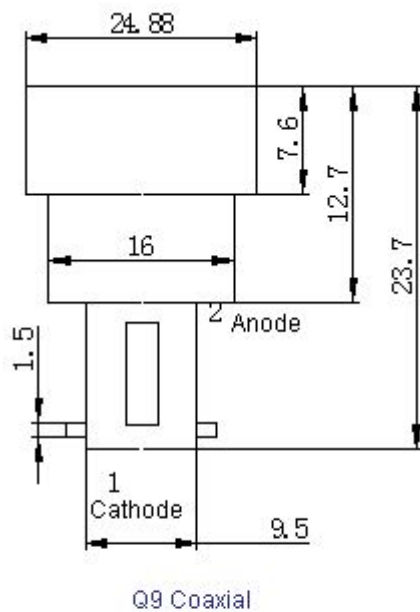


Fig. 6 Response Uniformity or the Sensitive Area

Package Information and Pin Configuration



Note and Usage Instruction

- 0 ReveIPe Bias work condition
- No Vibration and shock when device operating
- Static Charge Protection (Storage, Operating)