

7ID4 Series PbS Detectors

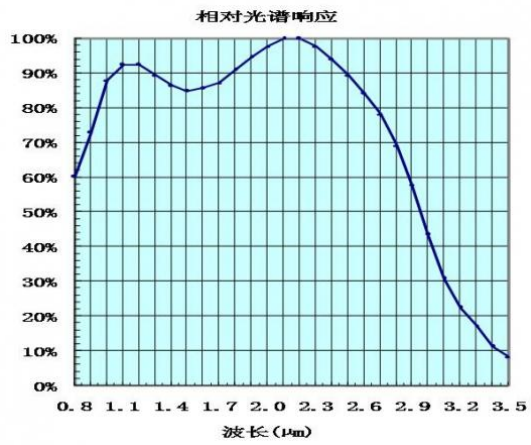
Temperature modulation type: Detector chamber with the design of standard installation size, can be used with related products produced by our company supporting the use, also with a pre-amplifier:



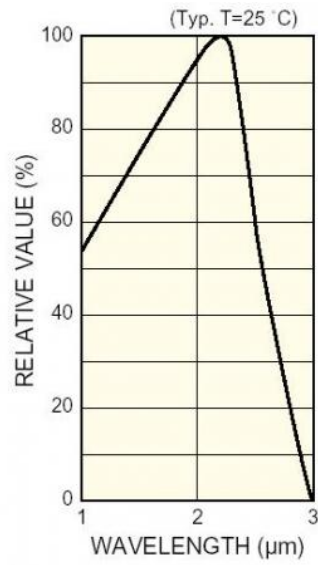
- The equivalent input noise: $\leq 1 \mu V$
- Input impedance: $\geq 3M\Omega$
- Operating frequency: $20Hz \leq f \leq 100KHz$
- Input signal: 30mV
- Magnification: 50

Main specifications:

Model	7ID4321(domestic chips)	7ID4302(imported chips)
Active size (mm×mm)	6×6	1×5
Wavelength range (μm)	0.8-3.2	0.8-3.0
Peak Re wavelength (μm)	≥ 2.1	2.2
Responsivity (V/W)	≥ 300	3×10^4
R_d ($M\Omega$)	0.1-0.3	0.2-2
Specific detectivity D^* ($cm(Hz)^{1/2}/W$)	$\geq 1 \times 10^8$	5×10^8
Time constant (μs)	≤ 400	200
Weight	0.27kg	



7ID4321 Spectral response curve



7ID4302 Spectral response curve

Refrigeration modulation type: detector chamber with the design of standard installation size, can be used with related products produced by our company .

Parameters of Preampfier:

Input noise: $1.5\text{nVHz}^{1/2}$

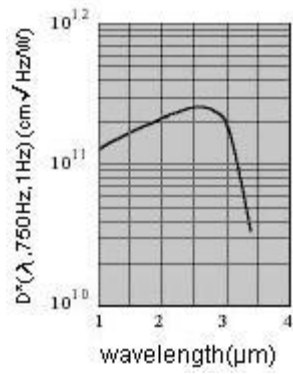
Input impedance: $50\text{K}\Omega$

Belt width: 10KHz

Input signal: 30mV

Magnification: 12-300

The maximum output: 10V (V_{pp})



Specifications:

Model	7ID4323T2 (imported chips)
Active size (mm×mm)	3×3
Wavelength range (μm)	0.8-3.2
wavelength λ_p (μm)	2.6
Responsivity λ_p (V/W)	3×10^5 (min)
R_d ($\text{M}\Omega$)	1-10
Specific detectivity D^* ($\text{cm}(\text{Hz})^{1/2}/\text{W}$)	2.5×10^{11}
Time constant (μs)	700-1200
Operating Temperature (K)	243