

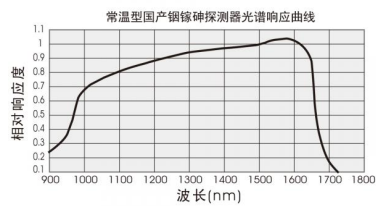
7ID3 Series InGaAs Detectors



Domestic chips at constant temperature type

Model		7ID3161	7ID3162	7ID3163
Active Diameter	mm	1	2	3
Responses	$V_R=0V, \lambda=850nm$	≥ 0.2		
	$V_R=0V, \lambda=1300nm$	≥ 0.75		
	$V_R=0V, \lambda=1550nm$	≥ 0.8		
Re (A/W)		≥ 0.8		
Spectral Range		850-1650nm		
Weight		0.18kg		

Parameters and spectral response curve of detector with domestic chip at constant temperature



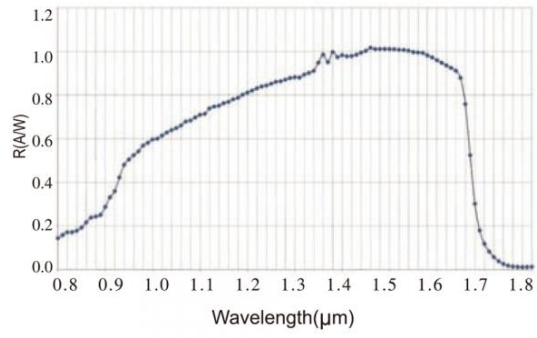
Detectors with Imported chips at constant temperature

Model	Active Diameter	Cut off wavelength	(Responsivity)	(NEP)	Dark Current
-------	-----------------	--------------------	----------------	-------	--------------

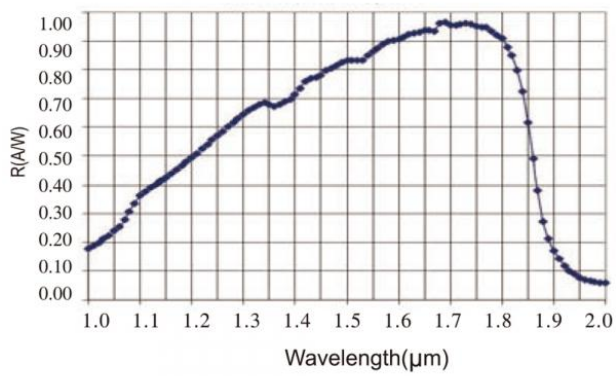
	mm	μm	A/W (typ.)	(W/ $\sqrt{\text{Hz}}$)min.	max.
7ID3171	1	1.7	0.95@1550nm	1×10^{-14}	100nA@5V
7ID3172	2			3×10^{-14}	200nA@1V
7ID3173	3			5×10^{-14}	500nA@1V
7ID3175	5			28×10^{-14}	10 μA (@0.3V
7ID3191	1	1.9	1.0@1690nm	0.13×10^{-12}	4 μA @1V
7ID3192	2			0.26×10^{-12}	10 μA @1V
7ID3193	3			0.38×10^{-12}	22.5 μA @1V
7ID3212	2	2.1	1.0@1800nm	0.14×10^{-13}	10 μA @1V
7ID3231	1	2.3	1.0@1840nm	0.46×10^{-12}	10 μA @1V
7ID3232	2			1.66×10^{-12}	40 μA @1V
7ID3233	3			2.87×10^{-12}	100 μA @1V
7ID3261	1	2.6	1.0@2200nm	2.03×10^{-12}	80 μA @0.5V
7ID3262	2			3.31×10^{-12}	320 μA @0.5V
7ID3263	3			5.74×10^{-12}	500 μA @0.5V

Spectral response curve of InGaAs detector with Imported chips at constant temperature

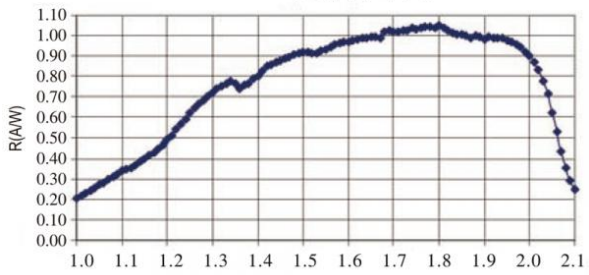
7ID317光谱响应曲线

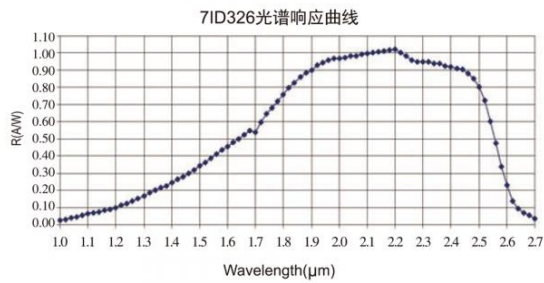
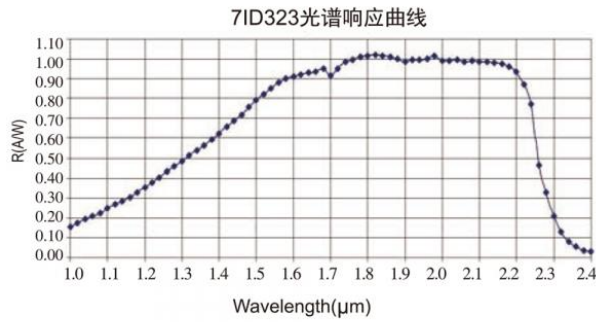


7ID319光谱响应曲线



7ID321光谱响应曲线





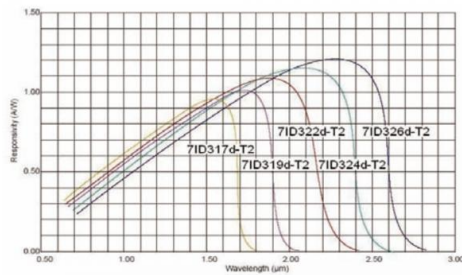
Refrigeration type: standard installation size, can be used with related products produced by our company . It is equipped with imported chips, imported thermostat, two grades refrigeration (-40 °C, temperature stability ± 0.5 °C), ambient temperature of use 10-40 °C. (New products)

Parameters and performances

model	Active Diameter (mm)	50% Cut off Wavelength (μm)	Peak Responsivity (A/W) min	Shunt Impedence (Ohm)		Peak D* ($\text{cmHz}^{1/2}/\text{W}$) @1KHz		NEP ($\text{W}/\text{rt-Hz}$) @peak wavelength		Capacitance (pF) @0V typ
				Min	typ	Min	typ	Max	typ	
7ID3171-T2	1	1.62	0.9 @1.55 μm	5.0 E+0.9	2.0 E+10	5.0 E+13	9.9 E+13	1.8E-15	8.9E-16	125
7ID3172-T2	2			1.1 E+09	4.4 E+09	4.7 E+13	9.3 E+13	3.8E-15	1.9E-15	500
7ID3173-T2	3			4.0 E+08	1.6 E+09	4.2 E+13	8.4 E+13	6.3E-15	3.2E-15	1200
7ID3175-T2	5			1.2 E+08	4.8 E+08	3.9 E+13	7.7 E+13	1.2E-14	5.8E-15	3200
7ID3191-T2	1	1.83 \pm 0.10	1.0	1.6 E+08	3.2 E+08	9.9 E+12	1.4 E+13	9.0E-15	6.3E-15	1000
7ID3192-T2	2			2.6 E+07	5.2 E+07	8.0 E+12	1.1 E+13	2.2E-14	1.6E-14	4000
7ID3193-T2	3			7.5 E+06	1.5 E+07	6.4 E+12	9.1 E+12	4.1E-14	2.9E-14	9000

7ID3221-T2	1	2.11 ± 0.10	1.1	5.5 E+06	1.1 E+07	2.0 E+12	2.9 E+12	4.4E-14	3.1E-14	1000
7ID3222-T2	2			9.5 E+05	1.9 E+06	1.7 E+12	2.4 E+12	1.1E-13	7.5E-14	4000
7ID3223-T2	3			2.6 E+05	5.2 E+05	1.3 E+12	1.9 E+12	2.0E-13	1.4E-13	9000
7ID3241-T2	1	2.31 ± 0.10	1.15	1.5 E+06	3.0 E+06	1.1 E+12	1.6 E+12	8.1E-14	5.7E-14	1000
7ID3242-T2	2			2.3 E+05	4.6 E+05	8.6 E+11	1.2 E+12	2.1E-13	1.5E-13	4000
7ID3243-T2	3			6.3 E+04	1.3 E+05	6.8 E+11	9.6 E+11	3.9E-13	2.8E-13	9000
7ID3261-T2	1	2.48 ± 0.10	1.2	4.0 E+05	8.0 E+05	5.9 E+11	8.4 E+11	1.5E-13	1.1E-13	1000
7ID3262-T2	2			6.0 E+04	1.2 E+05	4.6 E+11	6.5 E+11	3.9E-13	2.7E-13	4000
7ID3263-T2	3			1.5 E+04	3.0 E+04	3.4 E+11	4.9 E+11	7.7E-13	5.5E-13	9000

The diagram of spectral response for 7ID3xxd-T2 series cooling InGaAs detector



7ID3xxd-T2系列制冷型InGaAs探测器光谱响应图