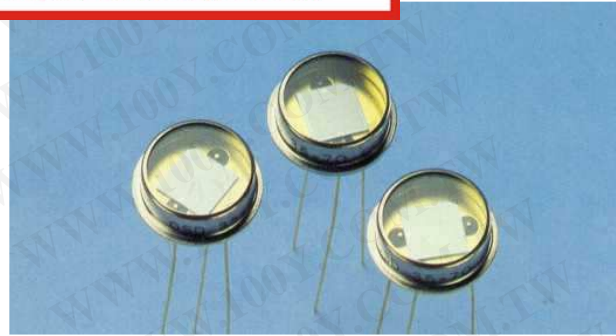


Silicon Photodetectors

Series 7

SUPER UV

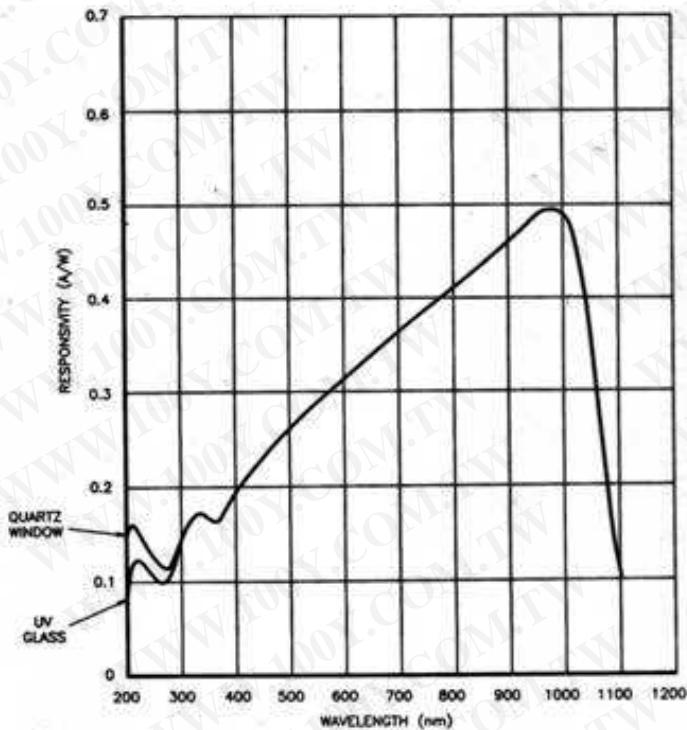
Series 7 Super UV Photodiodes compliment Series 1* and primarily designed for application in the 194-400 nm range where high shunt resistance and maximum sensitivity are needed. These detectors are available in a range of standard packages with a choice of window material to suit specific applications.



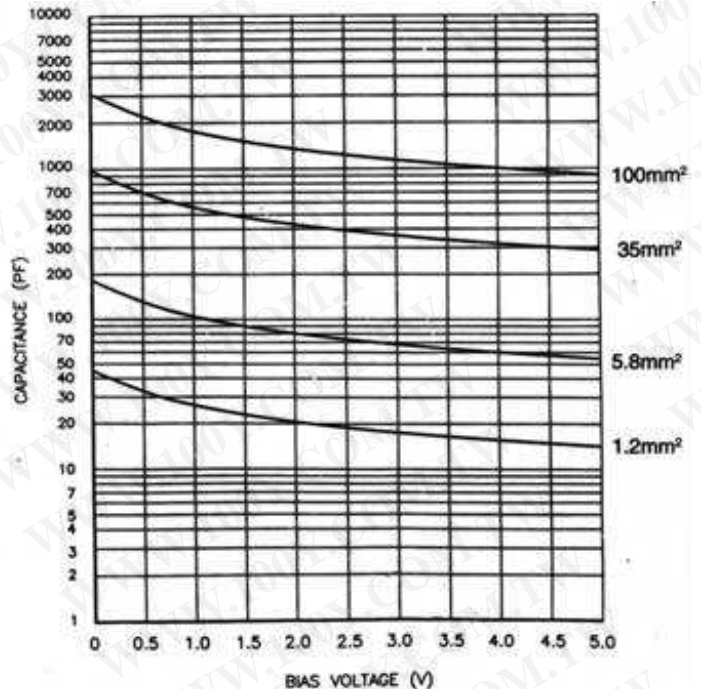
ABSOLUTE MAXIMUM RATINGS

	Max. Rating
DC Reverse Voltage	5V
Peak Pulse Current (1 μ s, 1% duty cycle)	200mA
Peak DC Current	10mA
Storage Temperature Range	-55°C to + 125°C
Operating Temperature Range	-55°C to + 70°C
Soldering Temperature for 5 seconds max.	200°C
*Max Illumination Intensity	100W/cm ²

Series 7 – Typical Spectral Response



Series 7 – Typical Capacitance versus Bias Voltage and Active Area



*Series 1 photodiodes available to special order. Data on request.

Silicon Photodetectors

Series 7

Electrical / Optical Specifications

(Characteristics measured at 22°C (±2) ambient unless otherwise stated)

Type No.	Window Option	Active Area		Responsivity A/W*				Dark Current pA @ Vr=10mV	NEP WHz ^{-1/2} λ = 900 nm	Capacitance PF	Rise Time μs Vr = 0V R _L =1kΩ	Shunt Resistance Gohm @ Vr±10mV		Package
		mm ²	mm	@254nm	@340nm	Typ.	Min.					Typ.	Min.	
OSD1.2-7	U	1.2	1.1 x 1.1	0.10	0.08	0.15	0.12	2	3 x 10 ⁻¹⁵	40	0.1	0.5	5	TO18
OSD1.2-7	Q	1.2	1.1 x 1.1	0.13	0.10	0.18	0.14	2	3 x 10 ⁻¹⁵	40	0.1	0.5	5	TO18

Type No.	Window Option	Active Area		Responsivity A/W*				Dark Current pA @ Vr=10mV	NEP WHz ^{-1/2} λ = 900 nm	Capacitance PF	Rise Time μs Vr = 0V R _L =1kΩ	Shunt Resistance Gohm @ Vr±10mV		Package
		mm ²	mm	@254nm	@340nm	Typ.	Min.					Typ.	Min.	
OSD5.8-7	U	5.8	2.4 x 2.4	0.10	0.08	0.15	0.12	3	6 x 10 ⁻¹⁵	170	0.4	0.5	3	TO5
OSD5.8-7	Q	5.8	2.4 x 2.4	0.13	0.10	0.18	0.14	3	6 x 10 ⁻¹⁵	170	0.4	0.5	3	TO5
OSD5.8-7	CO	5.8	2.4 x 2.4	0.14	0.11	0.19	0.15	3	6 x 10 ⁻¹⁵	170	0.4	0.5	3	22
OSD5.8-7	CQ	5.8	2.4 x 2.4	0.13	0.10	0.18	0.14	3	6 x 10 ⁻¹⁵	170	0.4	0.5	3	22

Type No.	Window Option	Active Area		Responsivity A/W*				Dark Current pA @ Vr=10mV	NEP WHz ^{-1/2} λ = 900 nm	Capacitance PF	Rise Time μs Vr = 0V R _L =1kΩ	Shunt Resistance Gohm @ Vr±10mV		Package
		mm ²	mm	@254nm	@340nm	Typ.	Min.					Typ.	Min.	
OSD35-7	U	33.6	5.8 x 5.8	0.10	0.08	0.15	0.12	20	1.5 x 10 ⁻¹⁴	1000	2.0	0.1	0.5	TO8
OSD35-7	Q	33.6	5.8 x 5.8	0.13	0.10	0.18	0.14	20	1.5 x 10 ⁻¹⁴	1000	2.0	0.1	0.5	TO8
OSD35-7	CO	33.6	5.8 x 5.8	0.14	0.11	0.19	0.15	20	1.5 x 10 ⁻¹⁴	1000	2.0	0.1	0.5	23
OSD35-7	CQ	33.6	5.8 x 5.8	0.13	0.10	0.18	0.14	20	1.5 x 10 ⁻¹⁴	1000	2.0	0.1	0.5	TO8

Type No.	Window Option	Active Area		Responsivity A/W*				Dark Current pA @ Vr=10mV	NEP WHz ^{-1/2} λ = 900 nm	Capacitance PF	Rise Time μs Vr = 0V R _L =1kΩ	Shunt Resistance Gohm @ Vr±10mV		Package
		mm ²	mm	@254nm	@340nm	Typ.	Min.					Typ.	Min.	
OSD100-7	U	100	10 x 10	0.10	0.08	0.15	0.12	50	2 x 10 ⁻¹⁴	3000	6.0	0.03	0.2	13
OSD100-7	Q	100	10 x 10	0.13	0.10	0.18	0.14	50	2 x 10 ⁻¹⁴	3000	6.0	0.03	0.2	13
OSD100-7	CO	100	10 x 10	0.14	0.11	0.19	0.15	50	2 x 10 ⁻¹⁴	3000	6.0	0.03	0.2	24
OSD100-7	CQ	100	10 x 10	0.13	0.10	0.18	0.14	50	2 x 10 ⁻¹⁴	3000	6.0	0.03	0.2	24

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

- Q = Quartz Window TO Packaging
- CQ = Quartz Window Ceramic Packaging
- CO = Open Frame (no window) Ceramic Packaging
- U = UV Transmissive Glass (TO packaging only)

FOR BEST RESPONSE BELOW 250nm SPECIFY OPEN FRAME VERSION

Highlighted items are Centronic standard products generally available from stock



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