

## PHOTOMETRIC RESPONSE

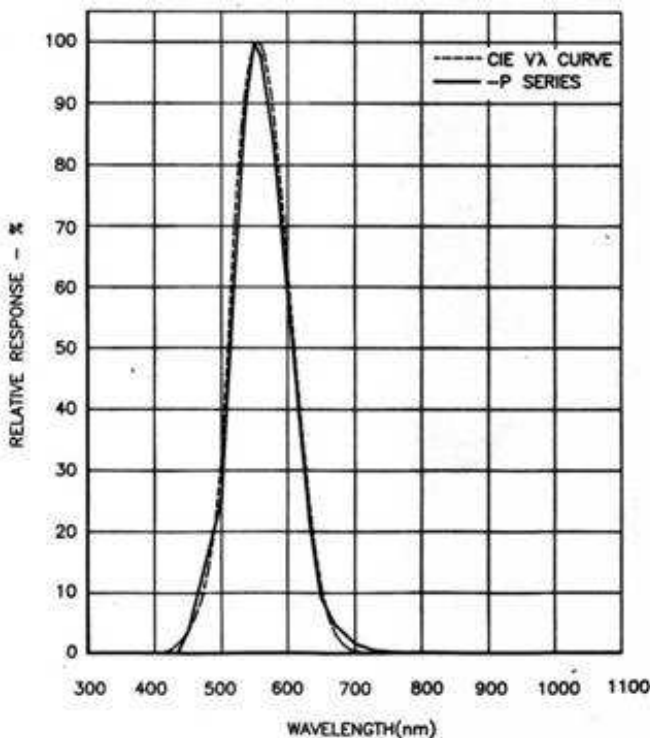
The Centronic range of photometric detectors feature Centronic's well proven Series 5T chip combined with specially designed coloured glass filters installed in front of the detector chip. The detectors simulate closely the spectral response of the human eye and are intended for applications requiring measurement of light levels for medical, CRT displays, LED, LCD displays and photography and other applications where a close match to the CIE curve is required.



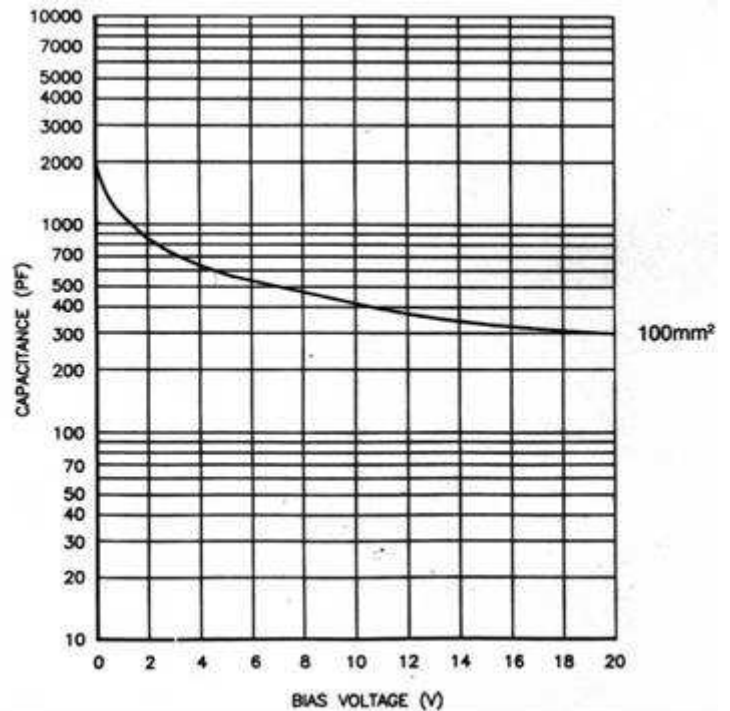
## ABSOLUTE MAXIMUM RATINGS

	Max. Rating
DC Reverse Voltage	15V
Peak Pulse Current (1 $\mu$ s, 1% duty cycle)	200mA
Peak DC Current	10mA
Storage Temperature Range	-25°C to + 80°C
Operating Temperature Range	0°C to + 75°C
Soldering Temperature for 5 seconds max.	200°C

Series P – Typical Spectral Response  
(Compared Observer Function)



OSD 100-P – Typical Capacitance versus Bias Voltage



## Electrical / Optical Specifications

Characteristics measured at 22°C (±) ambient, and a reverse bias of 12volts, unless otherwise stated.

Series P photodetectors are calibrated to match the CIE curve within 2% at 450 nm and 650 nm.

## Single Elements

Type No.	Active Area		Responsivity A/W λ = 550 nm		Dark Current nA		NEP WHz <sup>-1/2</sup> λ = 436 nm	Capacitance pF		Shunt Resistance *Megohms		Package
	mm <sup>2</sup>	mm	Min.	Typ.	Max.	Typ.	Vr = 0-V Typ.	Vr = 0-V Max.	Vr = 12V Max.	Min.	Typ.	
OSD100-P	100	11.3 dia	0.16	0.22	30	8	1.2 x 10 <sup>-13</sup>	2500	520	2	15	**
OSD100-P BNC	100	11.3 dia	0.16	0.22	30	8	1.2 x 10 <sup>-13</sup>	2500	520	2	15	BNC

\* Measured at ±10mV

\*\* Package 13 with additional filter housing

Highlighted items are Centronic standard products generally available from stock