

## High Speed Extended IR response (Series 3T)

3T series photodetectors are specifically designed for high speed, infra-red laser pulse detection. The detector structure designed to be fully depleted at 60 volts reverse bias, uses high resistivity silicon to achieve very low capacitance. The detectors offer high responsivity in the 800-1000 nm range but are equally suited to high speed application at longer wavelengths where maximum absolute responsivity is not as important as speed of response.

### Electrical / Optical Specifications

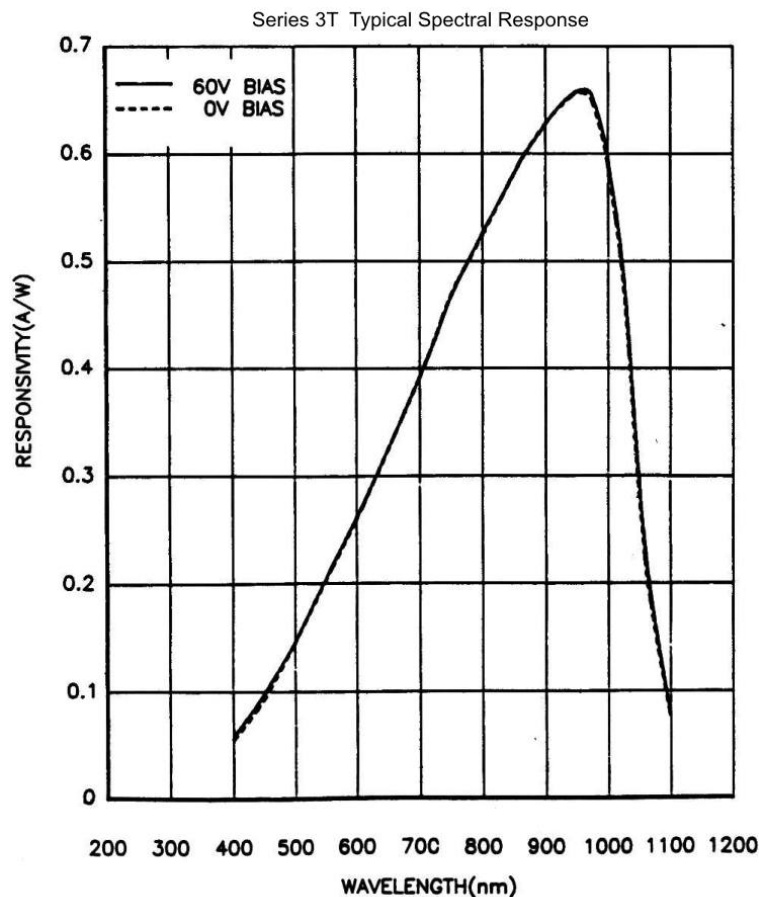
Characteristics measured at 22°C ( $\pm 2$ ) ambient, and a reverse bias of 60 volts, unless otherwise stated.

#### Single Elements

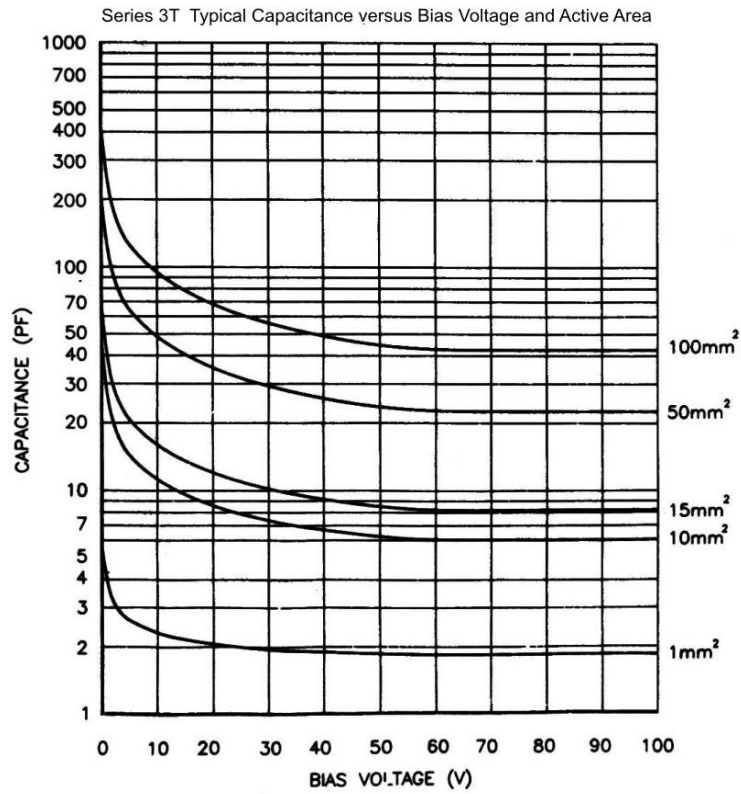
Type No.	Active Area		Responsivity A/W		Dark Current		NEP $WHz^{-1/2}$ $\lambda = 900$ nm Typ.	Capacitance pF		Risetime ns $\lambda = 900$ nm RL = 50 $\Omega$ (Typ.)	Package
	mm <sup>2</sup>	mm	$\lambda = 900$ nm		Max.	Typ.		$V_r=0$ V Max.	$V_r=60V$ Max.		
			Min.	Typ.							
OSD1-3T	1	1.13 dia	0.54	0.61	10	2	1.0e-13	7	2.5	10	TO18
OSD5-3T	5	2.52 dia	0.54	0.61	30	7	1.6e-13	30	5	10	TO5
OSD15-3T	35	3.8 x 3.8	0.54	0.61	40	10	1.9e-13	90	10	10	TO5
OSD35-3T	35	5.9 x 5.9	0.54	0.61	150	40	4.8e-13	205	22	10	TO8
OSD50-3T	50	7.98 dia	0.54	0.61	200	50	5.9e-13	290	27	10	TO8
OSD60-3T	62	7.9 x 7.9	0.54	0.61	300	50	5.9e-13	350	32	10	TO8
OSD100-3T	100	11.3 dia	0.54	0.61	600	200	8.3e-13	580	52	10	13

Highlighted items are Centronic standard products generally available from stock

## Series 3T Spectral Response Graph



# Capacitance versus Bias Voltage



*Due to our policy of continued development, specifications are subject to change without notice.*