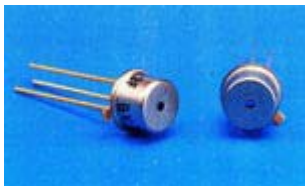
Ultra High Speed Detectors (AEPX)

to 

The AEPX Series of photodiodes is offered in a range of small active area sizes suitable for high frequency fibre optic applications. These photodetectors take advantage of an epitaxial structure to achieve good high frequency response at operating voltages as low as 5 volts. The detectors may also be operated at higher bias levels up to 20 volts achieve extremely fast pulsed response.

Electrical / Optical Specifications

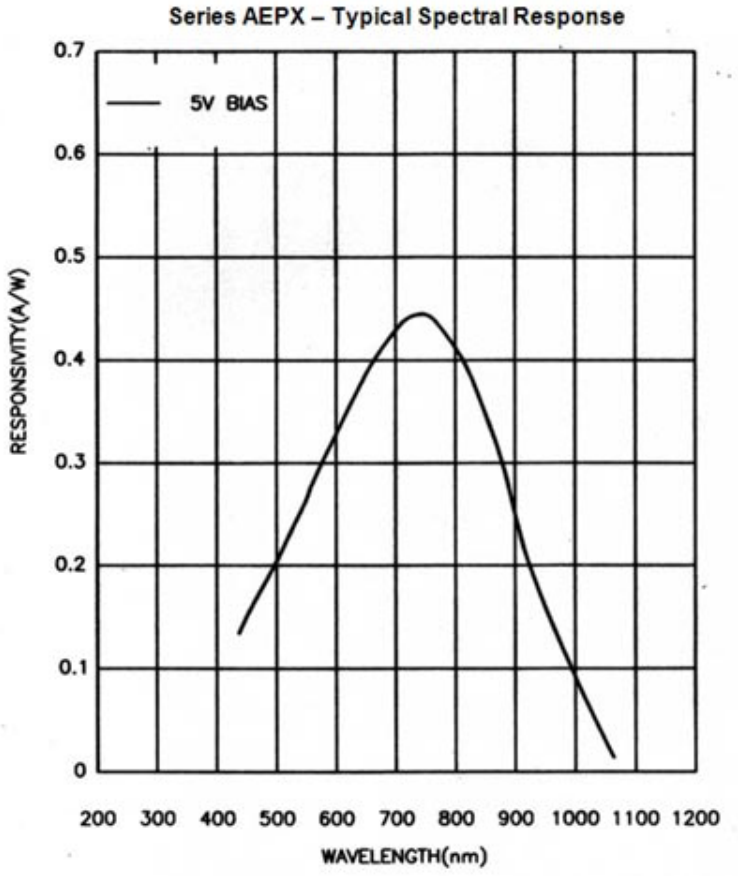
Characteristics measured at 22°C (±2) ambient, and a reverse bias of 12 volts, unless otherwise stated.

Single Elements

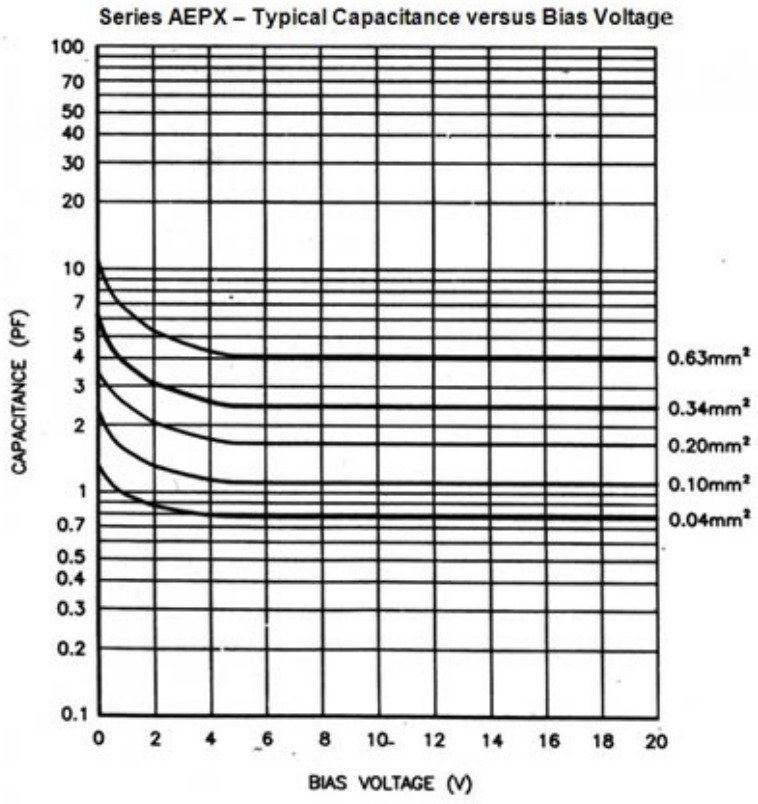
Type No.	Active Area		Responsivity A/W λ = 820 nm	Dark Current nA (5V)		NEP WHz$^{-½}$ λ = 900 nm 5V Typ.	Capacitance pF		Risetime ns λ = 820 nm Rl = 50 Ω Vr = 5V Typ.	Package
	mm²	mm		Max.	Typ.		Vr=5V Max	Vr=5V Typ.		
AEPX65	0.55	0.84 dia	0.35	10	2	6.8e-14	8	6	0.6	2
AEPX65R2F	0.55	0.84 dia	0.35	10	2	6.8e-14	8	6	0.6	2A
AEPX35	0.34	0.66 dia	0.35	5	1	4.8e-14	5	4	0.5	2A
AEPX20	0.20	0.51 dia	0.35	3	1	4.8e-14	4	3	0.4	2A
AEPX10	0.10	0.36 dia	0.35	3	0.5	3.4e-14	3	2	0.3	2A
AEPX04	0.04	0.23 dia	0.35	2	0.2	2.2e-14	2	1.5	0.3	2A
AEPX008	0.008	0.10 dia	0.35	1	0.1	1.5e-14	1.5	1	0.3	2A

Highlighted items are Centronic standard products generally available from stock

Series AEPX Spectral Response Graph



Capacitance versus Bias Voltage



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