

Industry Standard Silicon Photodiodes

SILICON PIN PHOTODIODES ■

Silicon Photodiodes – VTD Series



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Applications

- Pulse oximetry
- Automotive
- Surface mount assembly process

Features and Benefits

- Alternate source for industry standard photodiodes
- Surface mount package available
- Available in package with integrated IR filtering
- Large area PIN available on ceramic package
- RoHs compliant

Product Description

The VTD series are photodiodes which have been used in many applications as replacement for competitive devices.

Product Table

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Symbol	Industry Equivalent	Package	Active Area mm ²	Short Circuit Current		Maximum Dark	Junction Capacitance	Radiometric Sensitivity @ λ_p	Spectral Range	Typical Peak Wavelength	Noise Equivalent Power
				min I_{sc} μA		Current @ $V_R = 10V$ (nA)	typ C_j nF	typ S_R A/W	λ_{RANGE} nm	λ_p nm	typ NEP W/√Hz
VTD31AAH	CLD31AA	Ceramic	16.73	150 @ 5 mW/cm ² , 2850K		50 @ $V_R = 15V$	Max 500 @ $V_R = 0V$	0.55	400-1150	860	
VTD34H	BPW34	Mini-Dip	7.45	50 @ 1000 Lux, 2850K		30	60 @ $V_R = 0V$	0.6	400-1100	900	4.8 X 10-14
VTD34FH	BPW34F	Mini-Dip	7.45	15 @ 0.5 mW/cm ² , 940 nm		30	60 @ $V_R = 0V$	0.6	725-1150	940	4.8 X 10-14
VTD34SMH	BPW34	SMT	7.45	50 @ 1000 Lux, 2850K		30	Max 40 @ $V_R = 3V$	0.6	400-1100	900	4.8 X 10-14
VTD34FSMH	BPW34F	SMT	7.45	15 @ 0.5 mW/cm ² , 940 nm		30	Max 80 @ $V_R = 3V$	0.6	725-1150	940	-
VTD205H	SFH205	TO-92	7.41	15 @ 0.5 mW/cm ² , 940 nm		30	72 @ $V_R = 0V$	0.6	800-1100	925	-
VTD205KH	SFH205K	TO-92	7.41	50 @ 1000 Lux, 2850K		30	72 @ $V_R = 0V$	0.6	400-1100	925	-
VTD206H	SFH206	TO-92	7.41	15 @ 0.5 mW/cm ² , 940 nm		30	72 @ $V_R = 0V$	0.6	750-1100	925	-
VTD206KH	SFH206K	TO-92	7.41	50 @ 1000 Lux, 2850K		30	72 @ $V_R = 0V$	0.6	400-1100	925	-
VTH2090H	S1723-04	Black Ceramic	84.64	65 @ 100 Lux		10 @ $V_R = 30V$	70 @ $V_R = 30V$	0.6	400-1100	960	4 X 10-14

Figure 1

Package Drawing – VTD Series – Mini-DIP Package

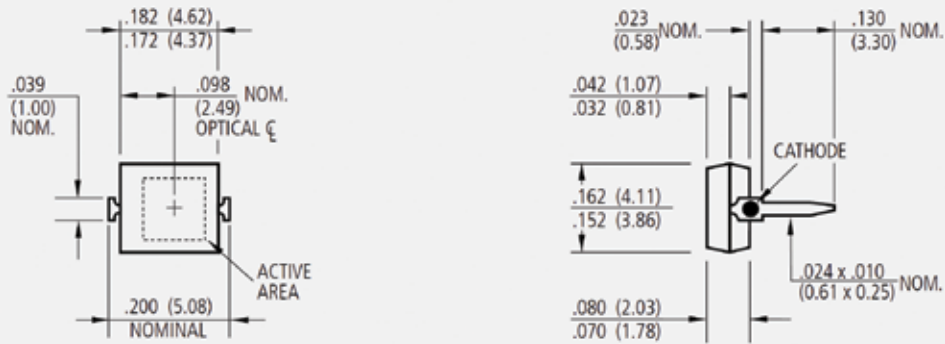


Figure 2

Package Drawing – VTD Series – SMT Package

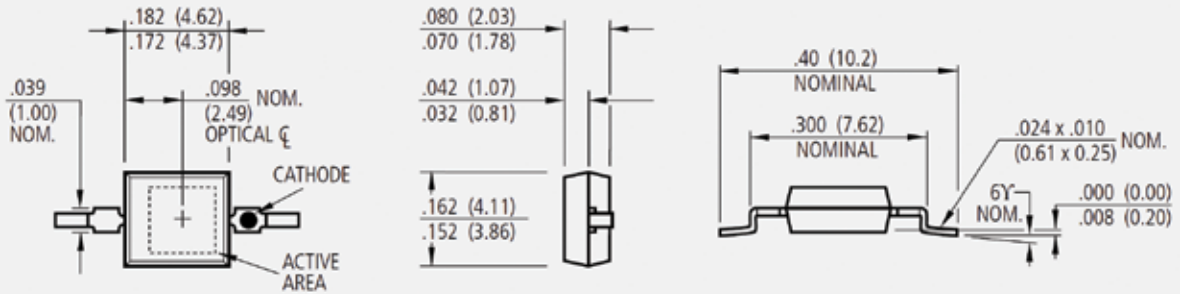


Figure 3

Package Drawing – VTD Series – TO-92 Package

