

Industry Standard Silicon Photodiodes

SILICON PN 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 PN 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 λ_{RANGE} nm	Typical Peak Wavelength λ_p nm	Noise Equivalent Power
				min I_{sc} μA	Current @ $V_R = 10\text{V}$ (nA)	typ C_j pF	typ S_R A/W	typ NEP W/√Hz			
VTD31AAH	CLD31AA	Ceramic	16.73	150 @ 5 mW/cm ² , 2850K	50 @ $V_R = 15\text{V}$	Max 500 @ $V_R = 0\text{V}$	0.55	400-1150	860		
VTD34H	BPW34	Mini-Dip	7.45	50 @ 1000 Lux, 2850K	30	60 @ $V_R = 0\text{V}$	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 @ $V_R = 0\text{V}$	0.6	725-1150	940	4.8 X 10 ⁻¹⁴	
VTD34SMH	BPW34	SMT	7.45	50 @ 1000 Lux, 2850K	30	Max 40 @ $V_R = 3\text{V}$	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 @ $V_R = 3\text{V}$	0.6	725-1150	940	4.8 X 10 ⁻¹⁴	
VTD205H	SFH205	TO-92	7.41	15 @ 0.5 mW/cm ² , 940 nm	30	72 @ $V_R = 0\text{V}$	0.6	800-1100	925	-	
VTD205KH	SFH205K	TO-92	7.41	50 @ 1000 Lux, 2850K	30	72 @ $V_R = 0\text{V}$	0.6	400-1100	925	-	
VTD206H	SFH206	TO-92	7.41	15 @ 0.5 mW/cm ² , 940 nm	30	72 @ $V_R = 0\text{V}$	0.6	750-1100	925	-	
VTD206KH	SFH206K	TO-92	7.41	50 @ 1000 Lux, 2850K	30	72 @ $V_R = 0\text{V}$	0.6	400-1100	925	-	

Figure 1

Package Drawing – VTD Series – Mini-DIP Package

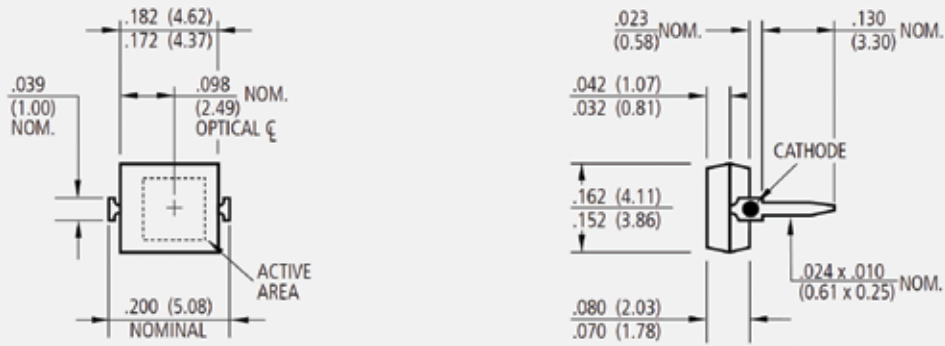


Figure 2

Package Drawing – VTD Series – SMT Package

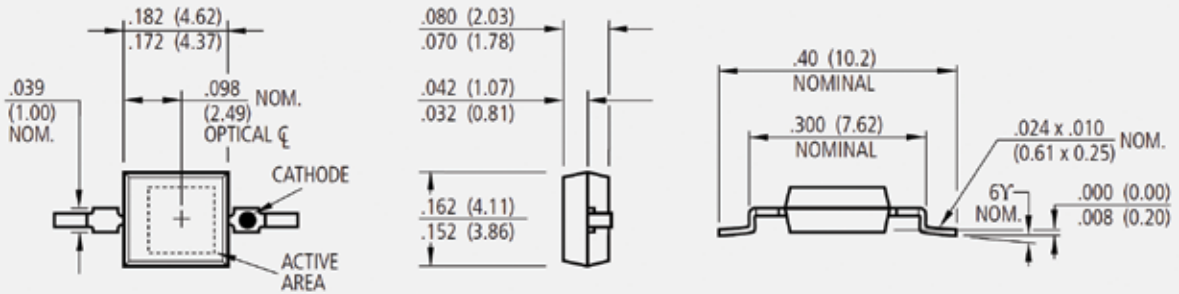


Figure 3

Package Drawing – VTD Series – TO-92 Package

