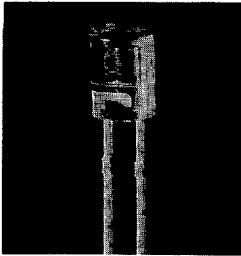


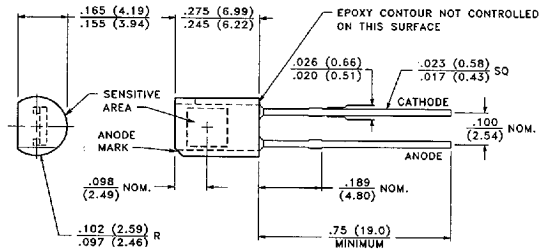
Alternate Source/ Second Source Photodiodes

VTD205K

(SFH205K INDUSTRY EQUIVALENT)



PACKAGE DIMENSIONS inch (mm)



PRODUCT DESCRIPTION

Large area planar silicon photodiode in a waterclear, cast epoxy sideloooker, similar in outline to the TO-92 package. These diodes exhibit low dark current under reverse bias and fast speed of response.

CASE 60 TO-92 TYPE (ROUND LENS)
CHIP ACTIVE AREA: .011 in² (7.41 mm²)

ABSOLUTE MAXIMUM RATINGS

Storage Temperature: -40°C to 100°C
Operating Temperature: -40°C to 100°C

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTD205K						UNITS
			Min.	Typ.	Max.	Min.	Typ.	Max.	
I _{sc}	Short Circuit Current	1000 Lux, 2856 K	50	80					μA
TC I _{sc}	I _{sc} Temperature Coefficient	2856 K		.20					% / °C
V _{oc}	Open Circuit Voltage	940 nm, H = 0.5 mW/cm ²	310	365					mV
TC V _{oc}	V _{oc} Temperature Coefficient	2856 K		-2.6					mV / °C
I _d	Dark Current	H = 0, V _R = 10 V		2	30				nA
C _J	Junction Capacitance	H = 0, V _R = 0 V, 1 MHz		72					pF
t _R / t _F	Rise/Fall Time @ R _L = 50Ω	V _R = 5 V, 850 nm		20					nsec
S _R	Sensitivity	@ Peak		0.6					A/W
λ _{range}	Spectral Application Range		400		1100				nm
λ _p	Spectral Response - Peak			925					nm
V _{BR}	Breakdown Voltage		20	50					V
θ _{1/2}	Angular Resp. - 50% Resp. Pt.			±60					Degrees