

SUPER INTENSITY VISIBLE LED/INFRARED LED/PHOTO DETECTOR

Stanley super-intensity infrared LEDs(DN type: 850nm)use GaAlAs/DH construction and provide both high intensity and high speed response. Besides this, three wavelengths of infrared are available-950nm(AN type), 925nm(BN type), and 880nm(CN type). In addition, 10 6package types are available to suit a variety of applications.

The □ □ 511 package was developed specifically for optical communications use and features an ideal configuration for both light sourcing and reception. By combining these devices with the FC-101 optical connector, fiber assembly is greatly simplified (see Fig.3).

▼**SUPER INTENSITY VISIBLE LED**

 $T_a = 25^\circ\text{C}$

Type No.	Wavelength		Absolute Maximum Ratings						Electro-Optical Characteristics										Fig.
	Peak TYP. λ_p	Spectral Line Half width TYP. $\Delta\lambda$	Power Dissipation P_d	Forward Current I_F	Peak Forward Current I_{FM}	Reverse Voltage V_R	Operating Temperature T_{opr}	Storage Temperature T_{stg}	Light Output I_e			Forward Voltage V_F			Reverse Current I_R		Cut-Off Frequency f_c		
									MIN.	TYP.	I_F	TYP.	MAX.	I_F	MAX.	V_R			
																		TYP.	
FH 1011	660	30	140	70	300	4	-30~+ 85	-30~+100	0.6	—	30	2.0	2.5	30	100	4	7	1	
FH 511	660	30	140	70	300	4	-30~+ 85	-30~+100	0.3	0.6	30	1.75	2.0	30	100	4	7		
BR 102N	660	30	140	70	300	4	-30~+100	+30~+125	1.5	3	20	1.7	2.0	20	100	4	7	2	
BR 105N	660	30	140	30	300	4	-30~+100	-30~+125	0.6	1.2	20	1.7	2.0	20	100	4	7		
Units	nm		mW	mA		V	°C		mW/sr		mA	V		mA	μA	V	MHz		

▼INFRARED LED FOR OPTICAL COMMUNICATIONS USE

$T_a=25^{\circ}\text{C}$

Type No.	Wavelength		Absolute Maximum Ratings						Electro-Optical Characteristics										Fig.		
	Peak TYP. λ_p	Spectral Line Half width TYP. $\Delta\lambda$	Power Dissipation Pd	Forward Current If	Peak Forward Current IfM	Reverse Voltage VR	Operating Temperature Topr	Storage Temperature Tstg	Radiant Intensity Ie		Forward Voltage			Reverse Current IR		Capacitance Co	Cut-Off Frequency fc				
											TYP.	If	TYP.	MAX.	If		MAX.	VR		TYP.	If
BN 511	925	50	150	100	1000	4	-30~+85	-30~+100	0.8	20	1.2	1.5	20	10	5	90	1.80	20			
CN 511	880	65	150	100	1000	5			6.0	50	1.45	1.8	50	10	5	20	0.65	50			
DN 511	850	40	150	100	1000	5			9.0	50	1.55	2.0	50	100	5	65	30	50			
Units	nm		mW	mA		V	°C		mW/sr	mA	V		mA	μA	V	pF	MHz	mA			

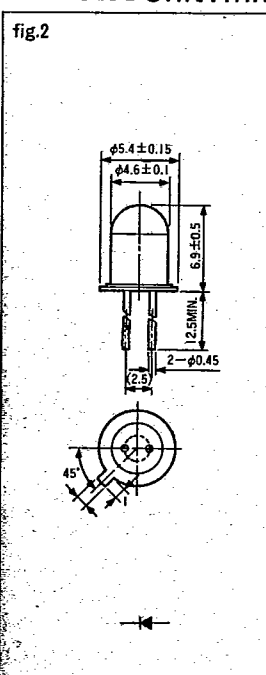
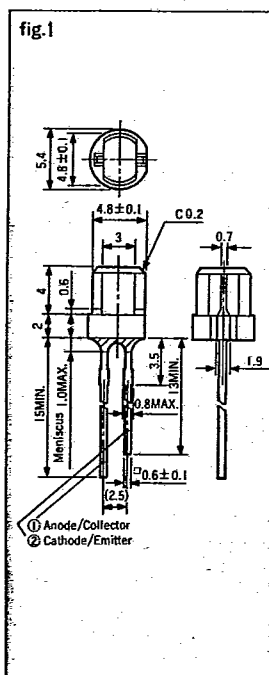
▼ PHOTO DETECTOR

$T_a = 25^\circ\text{C}$

Type No.	Peak Sensitivity Wavelength	Absolute Maximum Ratings							Electro-Optical Characteristics												Fig.
	λ_p	Collector Dissipation P_c	Voltage between Collector and Emitter V_{CE0}	Voltage between Emitter and Collector V_{EC0}	Collector Current I_c	Operating Temperature T_{opr}	Storage Temperature T_{stg}	Photo Current I_c			Response Time					Dark Current I_{ce0}		Collector Saturation Voltage $V_{CE(sat)}$			
								MIN.	TYP.	V_{CE}	T_r	T_f	V_{CE}	I_c	R_L	MAX.	V_{CE0}	TYP.	I_c		
PS 511	800	100	30	5	30	$-30\sim+85$	$-30\sim+100$	0.5	2.5	5	5	5	10	2	100	0.2	10	0.1	0.5	1	
PD 511	800	100	20	5	30			1	5	5	400	400	10	2	100	1	10	0.7	2		
Units	nm	mW	V	V	mA	$^{\circ}C$		mA	V	μsec	V	mA	Ω	μA	V	V	mA				

▼ **PACKAGE DIMENSIONS** Unit: mm

Unit: mm



▼CONNECTOR FOR 511 PACKAGE Unit:mm

Unit:mm

