

Stanley's super-intensity visible and infrared LEDs (660 nm to 950 nm) are suitable as light sources for optical communications, bar-code readers and sensors. The package of the □□-311, □□-511 and □□-1011 series, used for light sourcing and reception, can be easily combined with lenses since the position determination accuracy is very high.

▼INFRARED LED FOR OPTICAL COMMUNICATIONS USE

Ta=25°C

Type No.	Absolute Maximum Ratings							Electro-Optical Characteristics											Fig.
	Power Dissipation	Forward Current	Derating	Peak Forward Current	Reverse Voltage	Operating Temp.	Storage Temp.	Radiant Intensity			Forward Voltage			Reverse Current		Cut-Off Frequency	Peak Sensitive Wavelength		
	Pd	If	ΔIf	IFM	VR	Topr	Tstg	IE			VF			Ir		Fc TYP.	λp TYP.	λ1 TYP.	
								MIN.	TYP.	If	TYP.	MAX.	If	MAX.	VR				
FH1011	140	70	0.93	300	4	-30~+85	-30~+100	0.6	1.2	30	2	2.5	30	100	4	7	660	30	1
FH511	140	70	0.93	300	4	-30~+85	-30~+100	0.3	0.6	30	1.75	2.0	30	100	4	7	660	30	
BN511	150	100	1.33	1000	4	-30~+85	-30~+100	0.4	0.8	20	1.2	1.5	20	10	4	1.8	925	50	
DN511	150	100	1.33	1000	5	-30~+85	-30~+100	5	9	50	1.55	2	50	100	5	30	850	40	
KR311	140	70	0.93	300	5	-30~+85	-30~+100	1	1.7	50	2.1	2.5	50	100	5	7	660	30	2
DN311	150	100	1.33	1000	5	-30~+85	-30~+100	1	3.5	50	1.55	2	50	100	5	30	850	40	
Units	mW	mA	mA/°C	mA	V	°C	°C	mW/sr	mA		V	mA	μA	V	MHz		nm		

※IFM condition: $t_w \leq 100 \mu s$ and duty $\leq 1/100$

※Fc condition: $I_F=50 \text{ mA DC} + 10 \text{ mAp-p}$

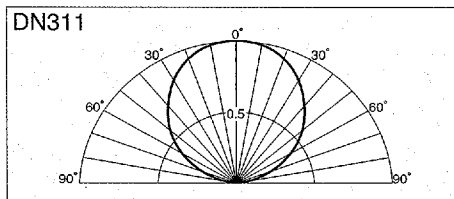
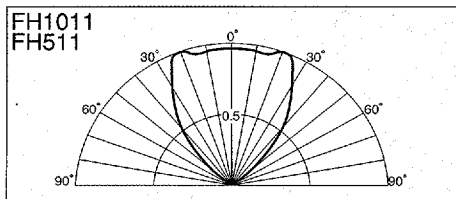
▼PHOTO DETECTOR · Phototransistor

Ta=25°C

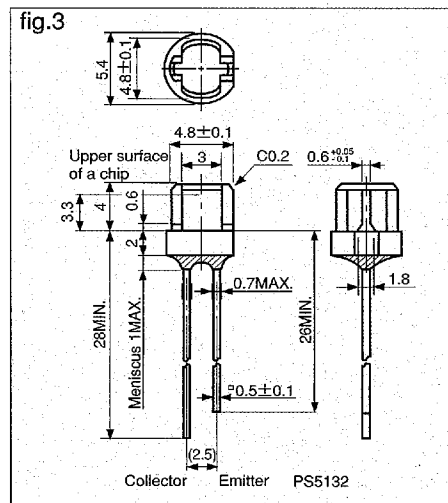
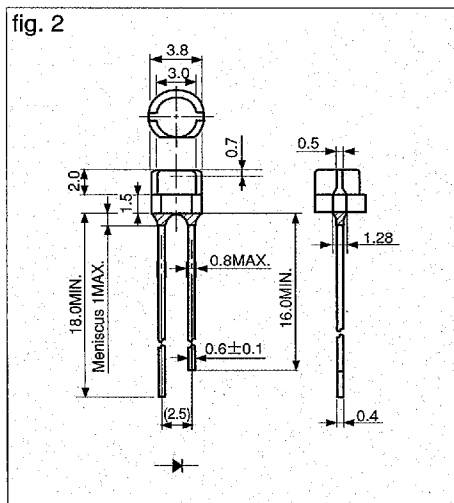
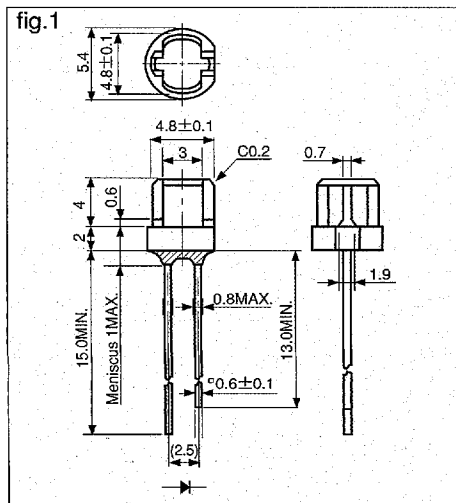
Type No	Absolute Maximum Ratings							Electro-Optical Characteristics												
	Collector Dissipation	Collector-Emitter Breakdown Voltage	Emitter-Collector Breakdown Voltage	Collector Current	Operating Temp.	Storage Temp.	Photo Current I _c				Response Time T _r , T _f				Dark Current I _{CEO}	Collector Saturation Voltage		Peak Sensitive Wavelength λ _p	fig.	
	P _C	V _{CEO}	V _{ECO}	I _C	T _{opr}	T _{stg}	MIN	TYP	V _{CE}	E _e	TYP	V _{CE}	I _C	R _L	MAX	V _{CEO}	V _{CE}			λ _p TYP
																	TYP	I _C		
PS5132	100	30	5	30	-30~+85	-30~+100	2.1	6.3	5	10	5	10	2	100	0.2	10	0.1	0.5		880
Units	mW	V	V	mA	°C	°C			mA	V	mW/cm ²	μsec	V	mA	Ω	μA	V	V	mA	nm

※A standard tungsten filament lamp with 2.856K is used for the color temperature.

▼SPATIAL DISTRIBUTION



▼PACKAGE DIMENSIONS Unit : mm



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