



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	MIN.	TYP.	IF	TYP.	MAX.	IF	MAX.	Vr	Fc TYP.	λp TYP.	Δλ TYP.
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
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
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: tw ≤ 100 μs and duty ≤ 1/100

* Fc condition: If=50 mA DC + 10 mAp-p

▼PHOTO DETECTOR · Phototransistor

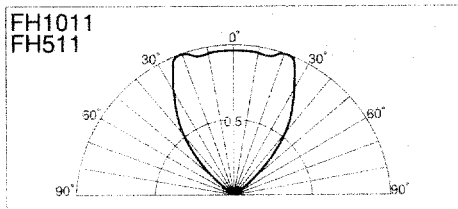
Ta=25°C

Type No.	Absolute Maximum Ratings						Electro-Optical Characteristics														fig.
	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 V _{CE}		Peak Sensitive Wavelength λ _p		
	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}	TYP.	I _c	TYP.		
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	3	
Units	mW	V	V	mA	°C	°C	mA		V	mW/cm ²	μsec	V	mA	Ω	μA	V	V	mA	nm		

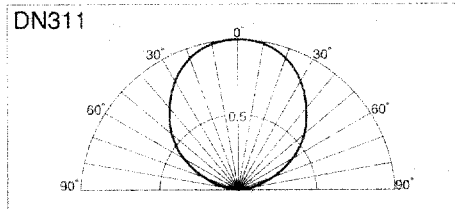
* A standard tungsten filament lamp with 2.856K is used for the color temperature.

▼SPATIAL DISTRIBUTION

FH1011
FH511



DN311



▼PACKAGE DIMENSIONS Unit : mm

fig.1

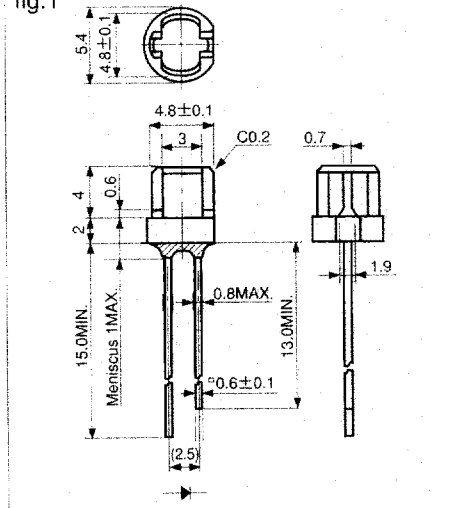


fig.2

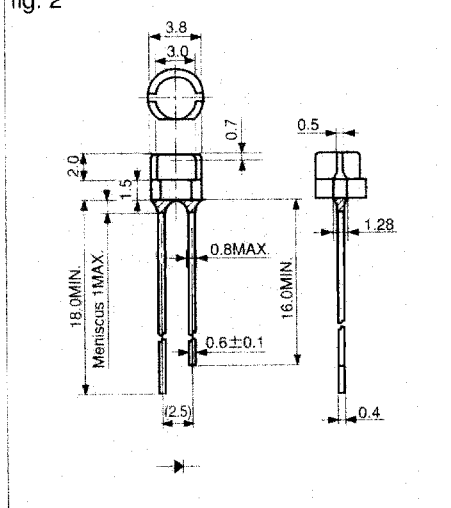


fig.3

