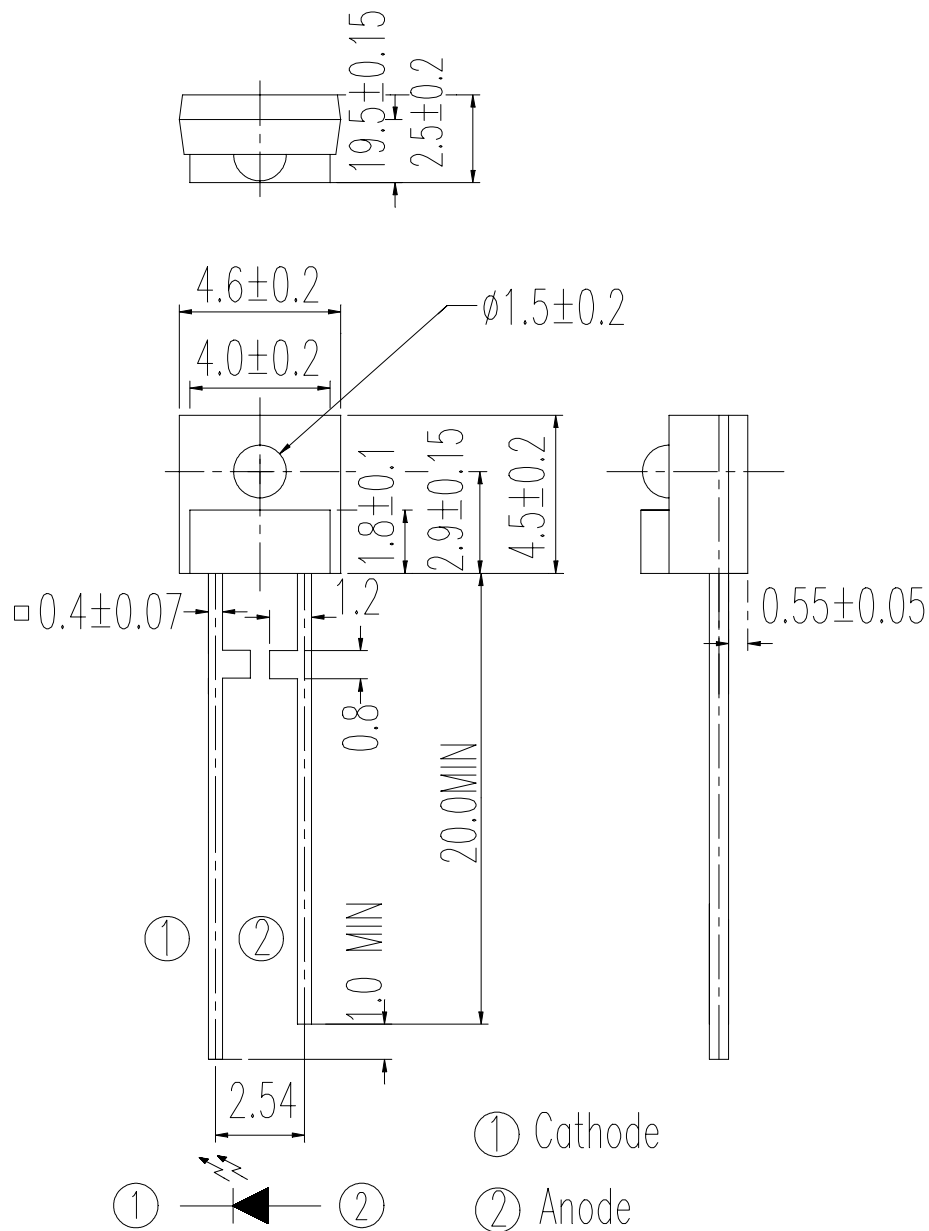




EVERLIGHT ELECTRONICS CO., LTD.

Device Number: DIR-092-141 REV: 1.0
MODEL NO: IR928-6C/P ECN: Page: 1/7

Package Dimensions:



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FAX: 886-2-2267-6189

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Device Number: DIR-092-141 REV: 1.0
MODEL NO: IR928-6C/P ECN: Page: 2/7

◎Notes :

- 1.All dimensions are in millimeter.
- 2.Lead spacing is measured where the lead emerge from the package .
- 3.Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
- 4.These specification sheets include materials protected under copyright of EVERLIGHT corporation . Please don't reproduce or cause anyone to reproduce them without EVERLIGHT's consent.
- 5.When using this product , please observe the absolute maximum ratings and the instructions for use outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.

Description

The **IR928-6C/P** is a GaAs infrared emitting diode. The miniature side-facing device has a chip that emits radiation from the side of the clear package.

Features

- Low forward voltage
- Peak wavelength $\lambda_p=940\text{nm}$
- High reliability

Applications

- Mouse
- Optoelectronic Switch
- Photo Interrupter



EVERLIGHT ELECTRONICS CO., LTD.

Device Number: DIR-092-141 REV: 1.0
MODEL NO: IR928-6C/P ECN: Page: 3/7

Absolute Maximum Ratings

(Ta=25°C)

Item	Symbol	Rating	Unit
Power Dissipation	P _D	75	mW
Reverse Voltage	V _R	5	V
Forward Current	I _F	50	mA
Peak Forward Current(*1)	I _{FP}	1	A
Operating Temperature	T _{opr}	-25~+85	°C
Storage Temperature	T _{stg}	-40~+85	°C
Soldering Temperature (1/16 inch from body for 5 seconds)	T _{sol}	260	°C

(*1) tw=100 μ SEC., T=10 m SEC.

Electro-Optical Characteristics

(Ta=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Condition
Light Current	I _L	11		50	μ A	I _F =5mA, V _{on} =5V
Peak Wavelength	λ _p		940		nm	I _F =20mA
Spectral Bandwidth	△λ		80		nm	I _F =20mA
View Angle	2θ 1/2		± 20		Deg	I _F =20mA
Forward Voltage	V _F		1.2	1.6	V	I _F =20mA
Reverse Current	I _R			10	μ A	V _R =5V



Device Number: DIR-092-141 REV: 1.0
MODEL NO: IR928-6C/P ECN: Page: 4/7

Typical Characteristics

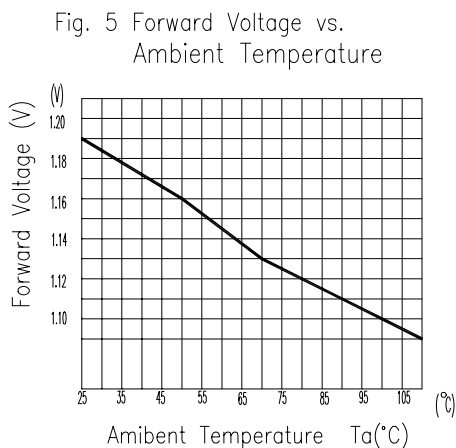
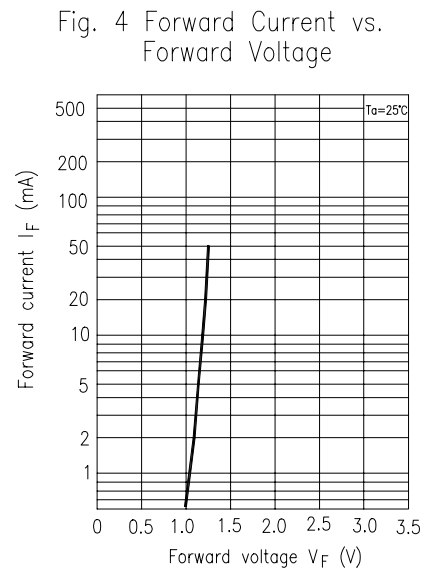
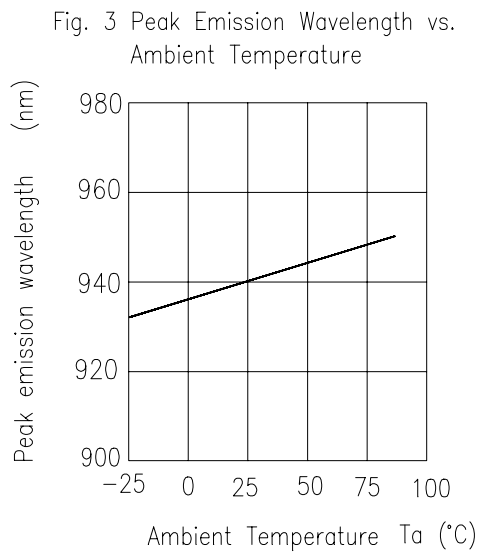
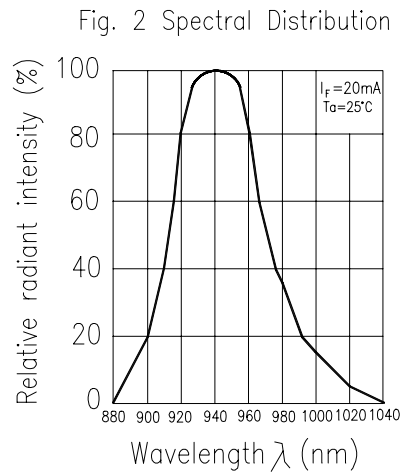
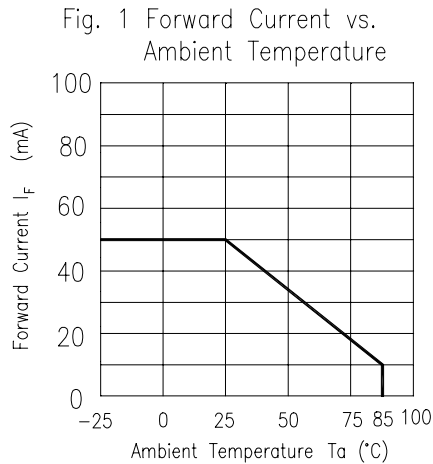
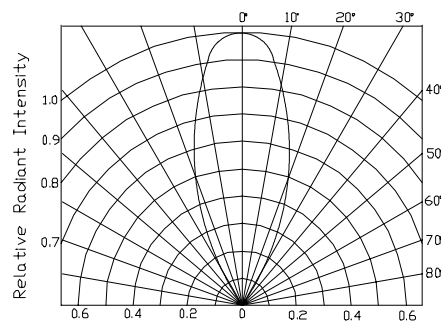


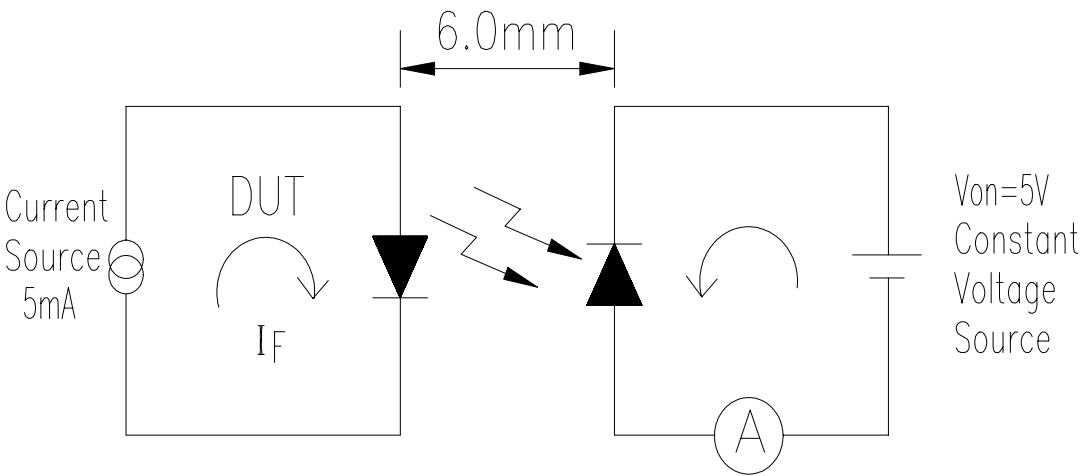
Fig. 6 Relative Radiant Intensity vs. Angular Displacement





Test Method

Infrared diode intensity test method for LED:



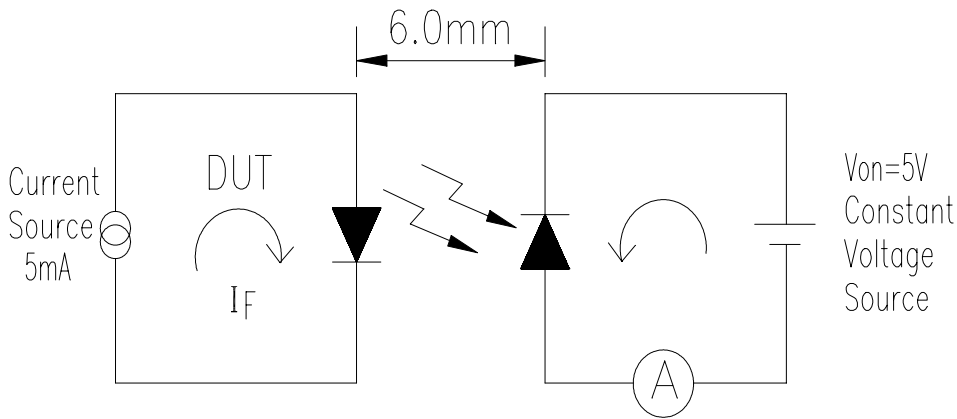
Ranks

Color Code	Parameter	Symbol	Min	Max	Unit	Test Condition
Red	6-1	I _L	30	45	μ A	I _F =5mA,V _{on} =5V
Blue	6-2	I _L	24	35	μ A	I _F =5mA,V _{on} =5V
Yellow	7-1	I _L	16	30	μ A	I _F =5mA,V _{on} =5V
Silver	7-2	I _L	14	26	μ A	I _F =5mA,V _{on} =5V
Green	7-3	I _L	11	20	μ A	I _F =5mA,V _{on} =5V



Test Method

Infrared diode intensity test method for LED:



Ranks

Color Code	Parameter	Symbol	Min	Max	Unit	Test Condition
Red	E1	I_L	14	21	μA	$I_F=5mA, V_{on}=5V$
Blue	E2	I_L	17	24	μA	$I_F=5mA, V_{on}=5V$
Yellow	E3	I_L	20	27	μA	$I_F=5mA, V_{on}=5V$
Silver	E4	I_L	23	30	μA	$I_F=5mA, V_{on}=5V$
Green	E5	I_L	26	33	μA	$I_F=5mA, V_{on}=5V$
Purple	E6	I_L	29	36	μA	$I_F=5mA, V_{on}=5V$
White	E7	I_L	32	39	μA	$I_F=5mA, V_{on}=5V$
Brown	E8	I_L	35	44	μA	$I_F=5mA, V_{on}=5V$
Orange	E9	I_L	40	50	μA	$I_F=5mA, V_{on}=5V$

Supplement

1.Parts (1) Chip

Type	Material	Peak Wavelength
IR	GaAs	940

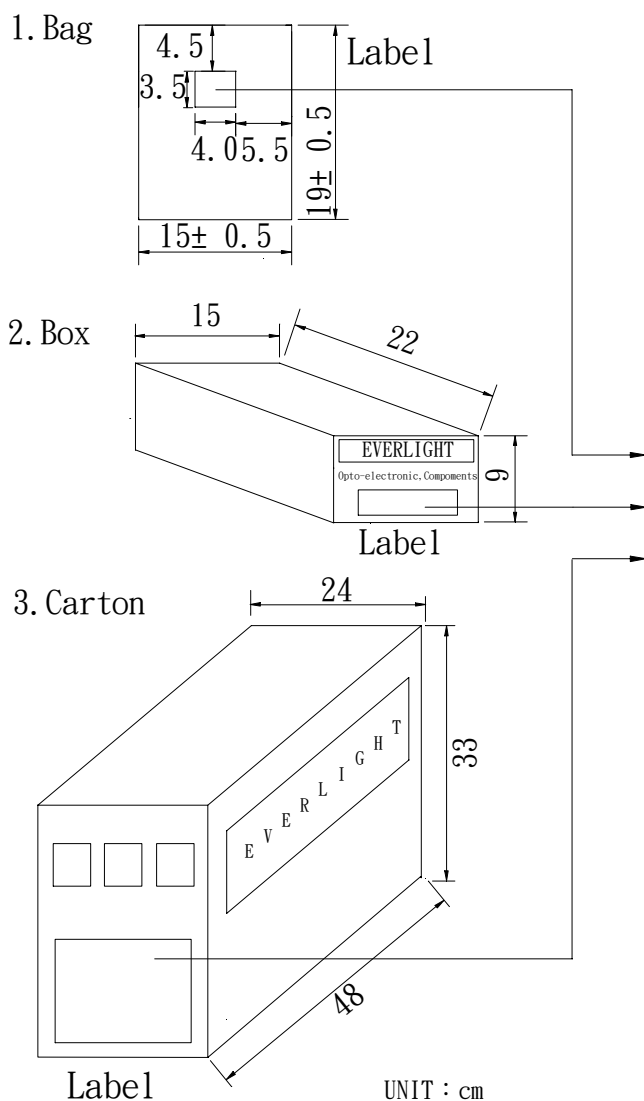
(2) Material

Type	Lead frame	Wire	Package
Material	SPCC	Gold	Epoxy



Device Number: DIR-092-141 REV: 1.0
MODEL NO: IR928-6C/P ECN: Page: 7/7

Packing Specifications



CPN: Customer's product number
P/N: Product number
QTY: Packing quantity
CAT: Ranks
HUE: Peak wavelength
REF: Reference
LOT NO: Lot number
MADE IN TAIWAN: Production place

Packing Quantity Specification

- 1.1000Pcs/1bag , 6bags/1box
- 2.10boxes/1Carton