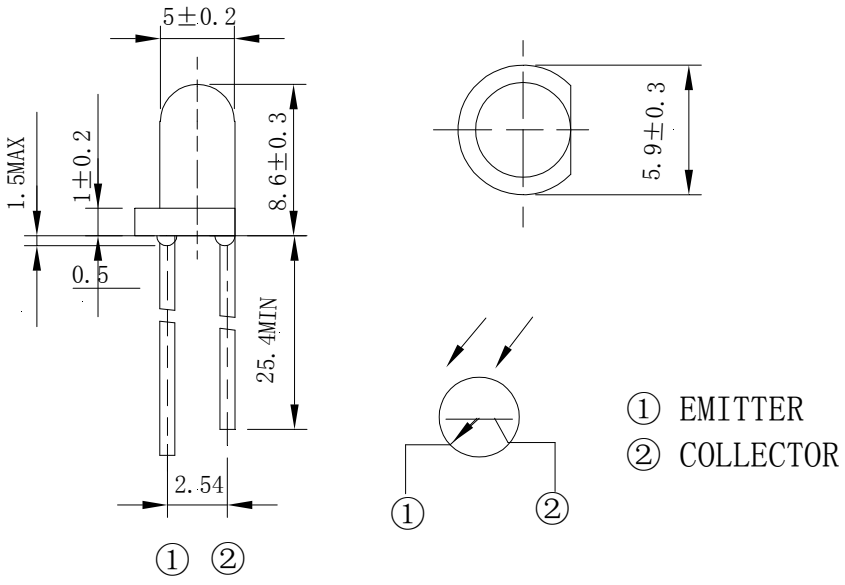
Features

· 5mm IR LED
· Wide Range Of Collector Current
· Lensed for high sensitivity.
· Low cost plastic side looking package.
· Clear transparent color package.
· Meet ROHS Green Product
· Package: 1000pcs/pack

Applications

· Receiver

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm(.01″) unless otherwise noted.
3. Specifications are subject to change without notice
4. This drawing is only for reference,not as a basis for the actual structure.

Selection Guide

Part No	Lens Type	Dice	Emitted Color
FDI-5861R9420-TC1	Water Clear	-	-

Electrical / Optical Characteristics At Ta=25℃

Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Condition
$V_{BR\ CEO}$	Collector to Emitter Breakdown Voltage	30			V	I_C=1mA Ee=0mW/cm^2
$V_{BR\ ECO}$	Emitter to Collector Breakdown Voltage	5			V	I_E=100μA Ee=0mW/cm^2
$V_{CE(SAT)}$	Collector to Emitter Saturation Voltage		0.4		V	I_E=100μA Ee=1mW/cm^2
T_R	Rise Time(10% to 90%)		5		μs	Vcc=5V Ic=1mA R_L=1KΩ
T_F	Fall Time(90% to 10%)		5		μs	
I_{CEO}	Collector Dark Current			100	nA	V_{CE}=10V Ee=0mW/cm^2
$I_{C(ON)}$	On State Collector Current	1.0	3.0	8.0	mA	V_{CE}=5V Ee=1mW/cm^2 λ=940nm

Absolute Maximum Ratings At Ta=25℃

Parameter	Maximum Rating	Unit
Power Dissipation	100	mW
Collector to Emitter Voltage	30	V
Emitter to Collector Voltage	5	V
Operating Temperature Range	-20℃ to + 80℃	
Storage Temperature Range	-30℃ to + 100℃	
Soldering Condition	260℃ For 5 Seconds	

Electrical Optical Characteristics Curves At Ta=25℃

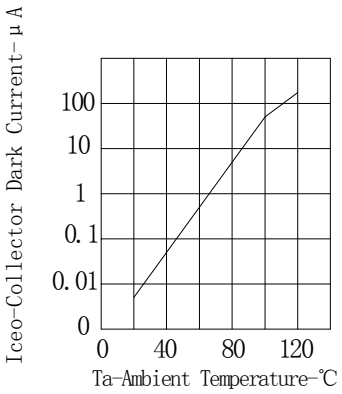


Fig.1 Collector Dark Current
VS Ambient Temperature

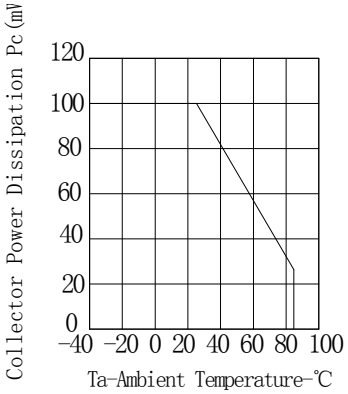


Fig. Collector Power Dissipation
VS Ambient Temperature

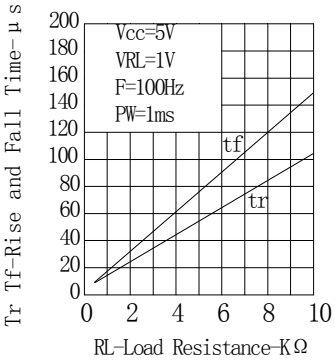


Fig.3 Rise And Fall Time
VS Load Resistance

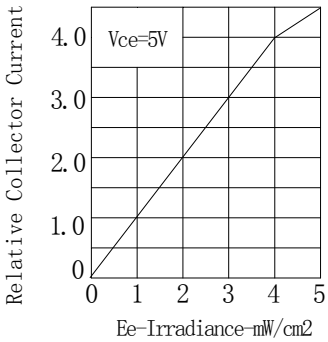


Fig.4 Relative Collector Current
VS Irradiance

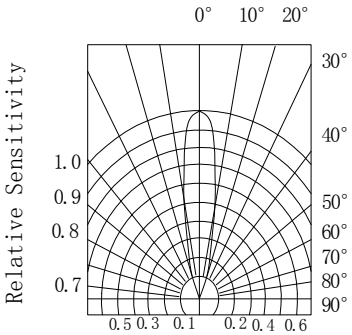


FIG.5 Sensitivity Diagram