

5mm Round Type Infrared Emitting Diode

MODEL NO : IE-5IR3AT2-17

Features :

- High radiant intensity
- Peak wavelength $\lambda_p=850\text{nm}$
- High reliability
- 2.54mm Lead spacing

Applications :

- Free air transmission system
- Optoelectronic switch
- Floppy disk drive
- Infrared applied system
- Smoke detector

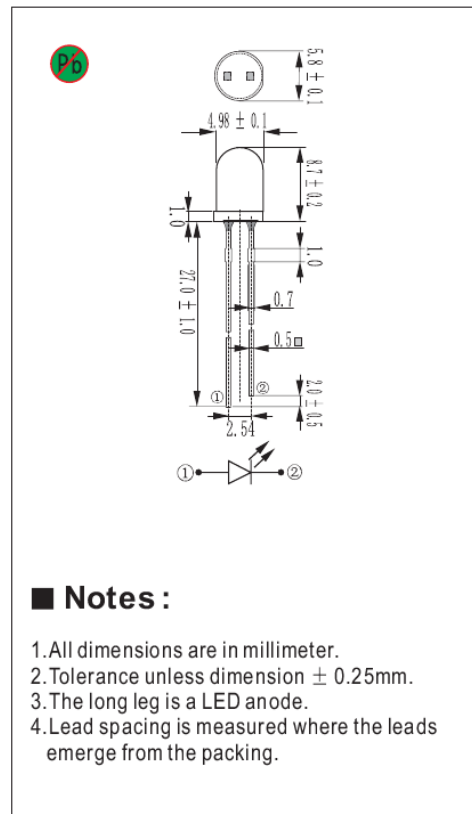
Description :

- IE-5IR3AT2-17 is a high intensity diode, molded in a transparent plastic package.
- The device is spectrally matched with phototransistor, photodiode and infrared receiver module.

Absolute Maximum Ratings (Ta=25°C) :

Parameter	Symbol	Rating	Unit	Remarks
Forward Current	I_F	100	mA	—
Peak Forward Current	I_{FP}	1	A	1/10 Duty Cycle
Reverse Voltage	V_R	5	V	—
Operating Temperature	T_{OPR}	-25~+85	°C	—
Storage Temperature	T_{Stg}	-30~+100	°C	—
Soldering Temperature	T_{Sol}	260	°C	<5 seconds
Power Dissipation	P_d	150	mW	—

Package Dimensions :



Notes :

1. All dimensions are in millimeter.
2. Tolerance unless dimension $\pm 0.25\text{mm}$.
3. The long leg is a LED anode.
4. Lead spacing is measured where the leads emerge from the packing.

Electronic Optical Characteristics : (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition	
Radiant Intensity	Ee	8.5	30	—	mW/sr	$I_F=20\text{mA}$	
		—	85	—		$I_F=100\text{mA}$, $t_p=100\mu\text{s}$, $t_r/T=0.01$	
		—	750	—		$I_F=1\text{A}$, $t_p=100\mu\text{s}$, $t_r/T=0.01$	
Peak Wavelength	λ_p	—	850	—	nm	$I_F=20\text{mA}$	
Spectral Bandwidth		—	50	—	nm		
Forward Voltage	V_F	1.23	1.37	1.55	V	$I_F=20\text{mA}$	
		—	1.42	1.7			$I_F=100\text{mA}$, $t_p=100\mu\text{s}$, $t_r/T=0.01$
		—	2.6	4.0			$I_F=1\text{A}$, $t_p=100\mu\text{s}$, $t_r/T=0.01$
Reverse Current	I_R	5	—	10	μA	$V_R=5\text{V}$	
View Angle	$2\theta_{1/2}$	—	30°	—	deg	$I_F=20\text{mA}$	

Notes : =Pb free Soldering Application, Pb<1000ppm (RoHS-Compliant)

- ▲ LEDs
- ▲ LED Displays
- ▲ LED Light
- ▲ Infrared LEDs
- ▲ LCD Backlight