



# LIR05AF-30

## LIGHT EMITTING DIODE

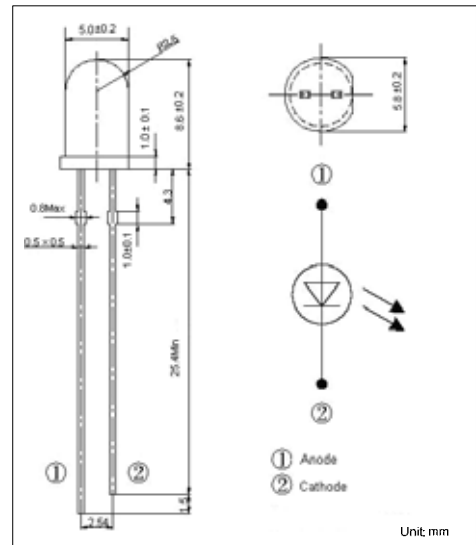
### LED LAMP

#### DESCRIPTION

UTC **LIR05AF-30** is a high intensity infrared emitting diode, molded in a water clear plastic package.

#### APPLICATIONS

- \* TV,VCR,DVD
- \* Sound equipment
- \* Air conditioner
- \* Infrared applied system



#### ORDERING INFORMATION

Ordering Number
LIR05AF-30

<p>L I R 0 5 A F - 3 0</p>	<p>(1)View Angle  (2)Package Outline  (3)Encapsulate Type  (4)Diameter of Lamp  (5)Color Type  (6)Product Type</p>	<p>(1) 30: 30°±3°  (2) F: Round with Brim  (3) A: Colorless Transparent  (4) 05: Φ5  (5) IR: Infra Red 940nm  (6) L: Lamp</p>
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■ ABSOLUTE MAXIMUM RATINGS (Ta=25 )

PARAMETER	SYMBOL	RATINGS	UNIT
Reverse Voltage	$V_R$	5	V
Forward Current	$I_F$	100	mA
Peak Forward Current (Pulse Test)	$I_{FM}$	1000	mA
Power Dissipation	$P_D$	150	mW
Operation Temperature	$T_{OPR}$	-25 ~ +85	
Storage Temperature	$T_{STG}$	-40 ~ +85	

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.  
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL OPTICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	$V_F$	$I_F=20mA$		1.2	1.45	V
	$V_F$	$I_F=200mA$		1.42		V
Reverse Current	$I_R$	$V_R=5V$			10	$\mu A$
Peak Wavelength	$\lambda_p$	$I_F=20mA$		940		nm
Spectral Radiation Bandwidth	$\Delta\lambda$	$I_F=20mA$		50		nm
Viewing Angle	$2\theta_{1/2}$			30		Deg
Raise Time	$t_R$	$I_F=20mA$		2		$\mu s$
Fall Time	$t_F$	$I_F=20mA$		1		$\mu s$
Luminous Intensity	$I_e$	$I_F=100mA,$ $t_p=20ms$		60		mW/sr
				80		

■ TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

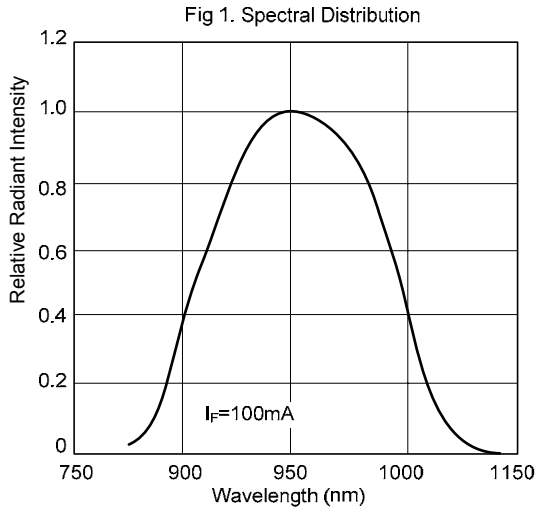
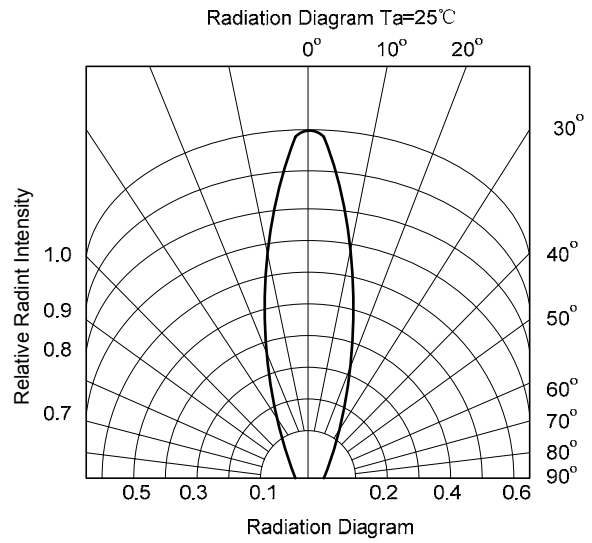


Fig 2. Relative Radiant Intensity vs. Angular Displacement



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