



LIR03AF-30

LIGHT EMITTING DIODE

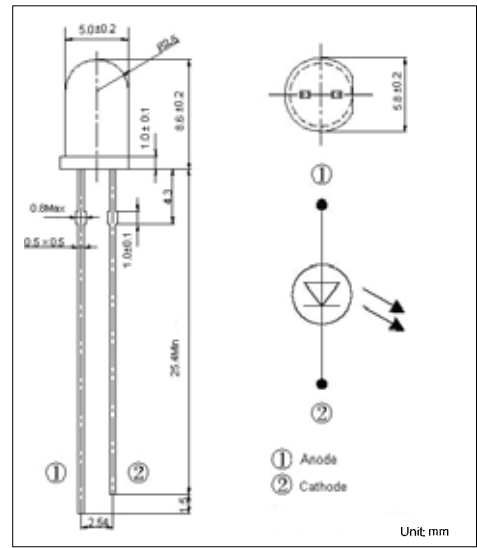
LED LAMP

DESCRIPTION

UTC **LIR03AF-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
LIR03AF-30

<p>L I R 0 3 A F - 3 0</p> <p>(1)View Angle</p> <p>(2)Package Outline</p> <p>(3)Encapsulate Type</p> <p>(4)Diameter of Lamp</p> <p>(5)Color Type</p> <p>(6)Product Type</p>	<p>(1) 30: 30°±3°</p> <p>(2) F: Round with Brim</p> <p>(3) A: Colorless Transparent</p> <p>(4) 03: Φ3</p> <p>(5) IR: Infra Red 940nm</p> <p>(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	20	mA
Peak Forward Current (Pulse Test)	I_{FM}	1000	mA
Power Dissipation	P_D	150	mW
Operation Temperature	T_{OPR}	-30 ~ 65	
Storage Temperature	T_{STG}	-40 ~ 80	

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	$I_F=20mA$	1.1		1.3	V
	V_F	$I_F=200mA$	1.3		1.5	V
Reverse Current	I_R	$V_R=5V$			10	μA
Peak Wavelength	λ_p	$I_F=20mA$		940		nm
Spectral Radiation Bandwidth	$\Delta\lambda$	$I_F=20mA$		45		nm
Viewing Angle	$2\theta_{1/2}$			30		deg
Raise Time	t_R	$I_F=20mA$		2		μs
Fall Time	t_F	$I_F=20mA$		1		μs
Luminous Intensity	I_e	$I_F=100mA,$ $t_p=20ms$	50		100	mW/sr

■ TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

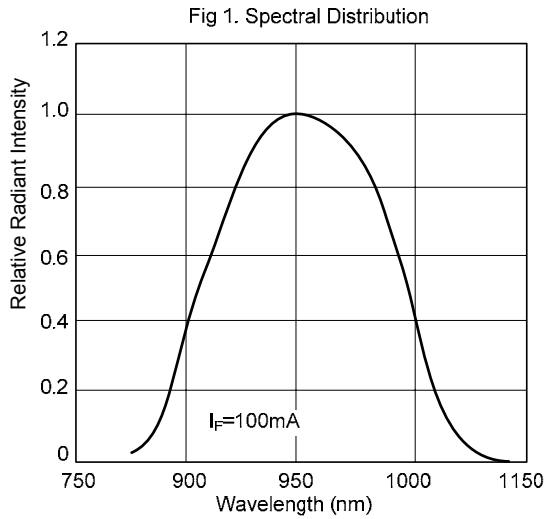
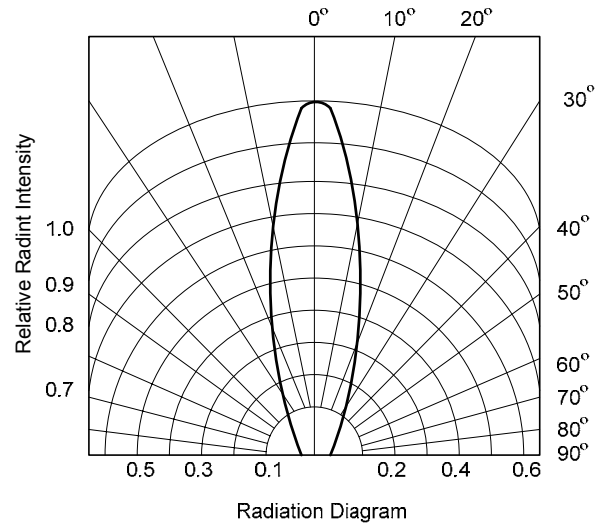


Fig 2. Relative Radiant Intensity vs. Angular Displacement
Radiation Diagram Ta=25°C



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