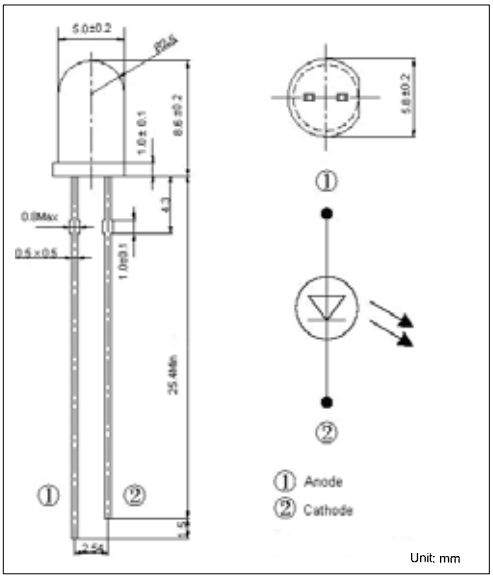
LIR03AF-60

LIGHT EMITTING DIODE

LED LAMP



■ DESCRIPTION

UTC **LIR03AF-60** 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-60

L I R 0 3 A F - 6 0 (1)View Angle (2)Package Outline (3)Encapsulate Type (4)Diameter of Lamp (5)Color Type (6)Product Type	(1) 60: 60°±3° (2) F: Round with Brim (3) A: Colorless Transparent (4) 03: Φ3 (5) IR: Infra Red 940nm (6) L: Lamp

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Reverse Voltage	V_R	5	V
Forward Current	I_F	20	mA
Peak Forward Current (Pulse width≤100usec. Time Cycle=10msec)	I_{FM}	1000	mA
Power Dissipation	P_D	150	mW
Operation Temperature	T_{OPR}	-35~+85	°C
Storage Temperature	T_{STG}	-40~ +85	°C

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		1.17		V
	V_F	I_F=200mA		1.4		V
Reverse Current	I_R	V_R=5V	0		10	μA
Peak Wavelength	λp	I_F=20mA		940		nm
Spectral Radiation Bandwidth	Δλ	I_F=20mA		45		nm
Viewing Angle	2θ1/2			60		deg
Raise Time	t_R	I_F=20mA		2		μs
Fall Time	t_F	I_F=20mA		1		μs
Radiant Intensity	Ie	I_F=100mA, t_P=20ms	20		30	mW/sr

■ TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

Fig 1. Spectral Distribution

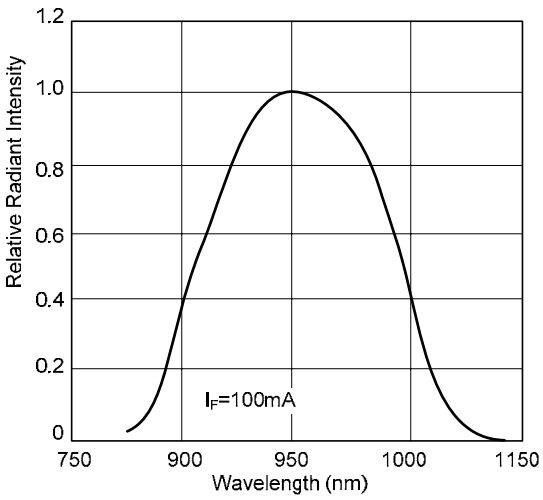


Fig 2. Relative Radiant Intensity vs. Angular Displacement