

## LIR05AF-30

## LIGHT EMITTING DIODE

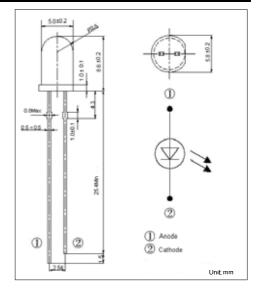


#### DESCRIPTION

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

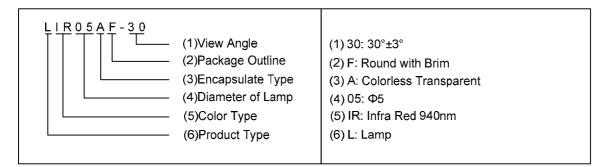
#### APPLICATIONS

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



#### ORDERING INFORMATION

O	rdering Number	
	LIR05AF-30	



#### ■ ABSOLUTE MAXIMUM RATINGS (Ta=25 )

PARAMETER	SYMBOL	RATINGS	UNIT
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	100	mA
Peak Forward Current (Pulse Test)	I <sub>FM</sub>	1000	mA
Power Dissipation	PD	150	mW
Operation Temperature	T <sub>OPR</sub>	-25 ~+85	
Storage Temperature	T <sub>STG</sub>	-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	VF	I <sub>F</sub> =20mA		1.2	1.45	V
	VF	I <sub>F</sub> =200mA		1.42		V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V			10	μA
Peak Wavelength	λр	I <sub>F</sub> =20mA		940		nm
Spectral Radiation Bandwidth	Δλ	I <sub>F</sub> =20mA		50		nm
Viewing Angle	201/2			30		Deg
Raise Time	t <sub>R</sub>	I <sub>F</sub> =20mA		2		μs
Fall Time	t⊢	I <sub>F</sub> =20mA		1		μs
Luminous Intensity	le	I <sub>F</sub> =100mA,		60		mW/sr
		t <sub>P</sub> =20ms		80		



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### LIGHT EMITTING DIODE

10<sup>°</sup>

02

Radiation Diagram

0.4

 $20^{\circ}$ 

 $30^{\circ}$ 

 $40^{\circ}$ 

 $50^{\circ}$ 

 $60^{\circ}$ 

70<sup>°</sup>

80°

 $90^{\circ}$ 

0.6

#### TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

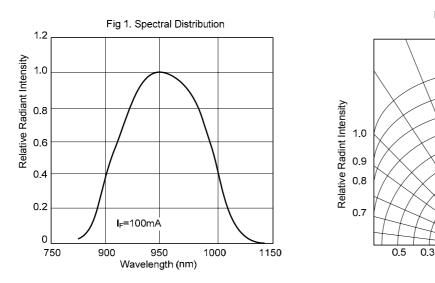


Fig 2. Relative Radiant Intensity vs. Angular Displacement

0°

0.1

Radiation Diagram Ta=25℃

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