

# UNISONIC TECHNOLOGIES CO., LTD

# LIR05AF-60

### LIGHT EMITTING DIODE

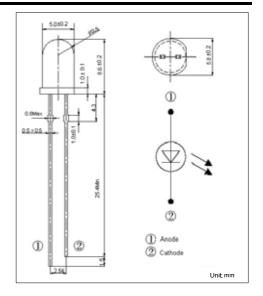
# LED LAMP

#### **DESCRIPTION**

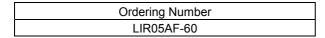
UTC LIR05AF-60 is a high intensity infrared emitting diode, molded in a water clear plastic package.

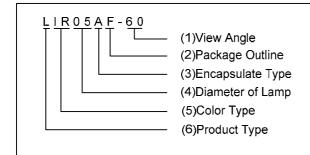
#### **APPLICATIONS**

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



#### ORDERING INFORMATION





- (1) 60: 60°±3°
- (2) F: Round with Brim
- (3) A: Colorless Transparent
- (4) 05: Ф5
- (5) IR: Infra Red 940nm
- (6) L: Lamp

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

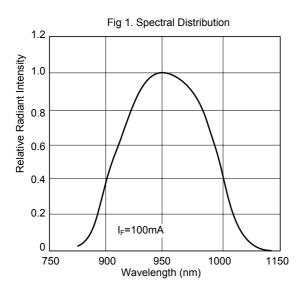
PARAMETER	SYMBOL	RATINGS	UNIT
Reverse Voltage	$V_R$	5	V
Forward Current	I <sub>F</sub>	100	mA
Peak Forward Current (Pulse Test)	I <sub>FM</sub>	1000	mA
Power Dissipation	$P_{D}$	150	mW
Operation Temperature	$T_{OPR}$	-25 ~ +85	$^{\circ}$
Storage Temperature	T <sub>STG</sub>	-40 ~ +85	$^{\circ}$

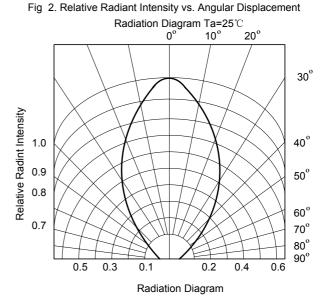
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

## ■ ELECTRICAL OPTICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT	
Forward Voltage	$V_{F}$	I <sub>F</sub> =20mA		1.2	1.45	V	
	$V_{F}$	I <sub>F</sub> =200mA		1.42		V	
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V			10	μΑ	
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			60		Deg	
Raise Time	t <sub>R</sub>	I <sub>F</sub> =20mA		2		μs	
Fall Time	t <sub>F</sub>	I <sub>F</sub> =20mA		1		μs	
Luminous Intensity		I <sub>F</sub> =100mA,		12		ma\\\/\au	
		t <sub>p</sub> =20ms		15		mW/sr	

#### ■ TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES





UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.