SPECIFICATION FOR LED LAMP

PART NO. : LT0283-A7-940
1.8MM AXIAL INFRARED LAMP

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1.8MM AXIAL INFRARED LAMP
PART NO. : LT0283-A7-940

Features

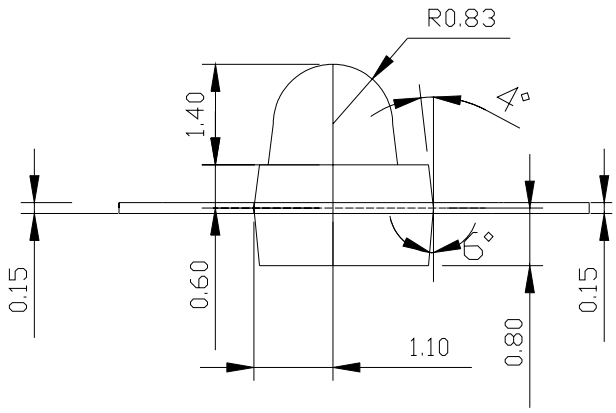
*** High radiant power**

*** Reliable and ruggen**

*** Lower degradation**

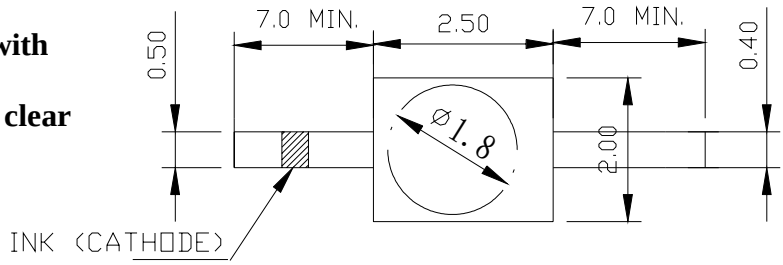
*** IC Compatible**

Package Dimensions



Description

The Infrared lamps are made with AlGaAs/GaAs chips and water clear epoxy resin.



Notes:

1.All dimensions are in millimeters.

2.Tolerance is ±0.25mm unless otherwise noted.

Part No.	Led Chip		Lens Color
	Material	Emitting Color	
LT0283-A7-940	AlGaAs/GaAs	Infrared	Water Clear

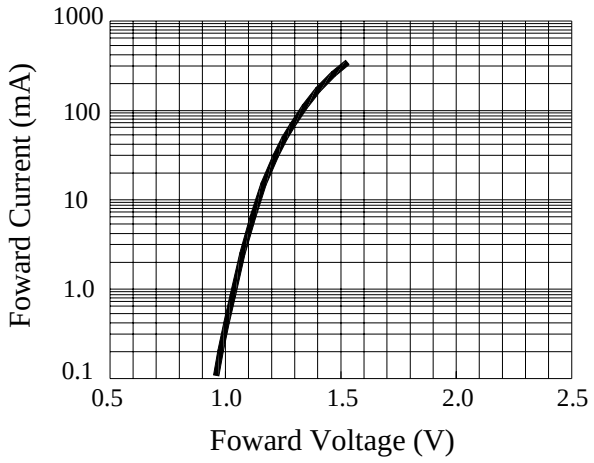
Absolute Maximum Ratings at Ta=25℃ :

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	150	mW
Reverse Voltage	Vr	5	V
D.C. Forward Current	If	30	mA
Peak Current (1/10 Duty Cycle , 0.1 ms Pulse Width)	If(Peak)	1	A
Operating Temperature Range	Topr	-25 to +85	℃
Storage Temperature Range	Tstg	-40 to +100	℃
Lead Soldering Temp.(1.6mm from body) for 5 seconds		260	℃

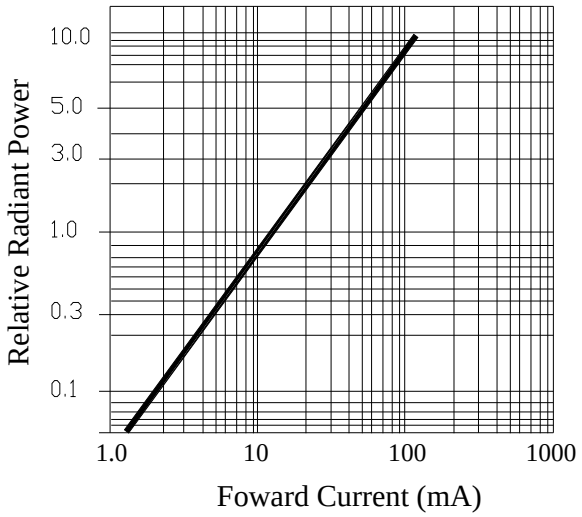
Electrical and Optical Characteristics :

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Rad iant Intensity	Ee	If=100mA	4.0	7.0		mw
Forward Voltage	Vf	If=20mA		1.2	1.5	V
		If=100mA		1.3	1.7	V
Peak Wavelength	λ P	If=20mA		940		nm
Dominant Wavelength	λ D	---------				nm
Reverse Current	Ir	Vr=5V			100	μ A
Viewing Angle	2θ 1/2	If=20mA		36		deg
Spectrum Line Halfwidth	Δ λ	If=20mA		50		nm

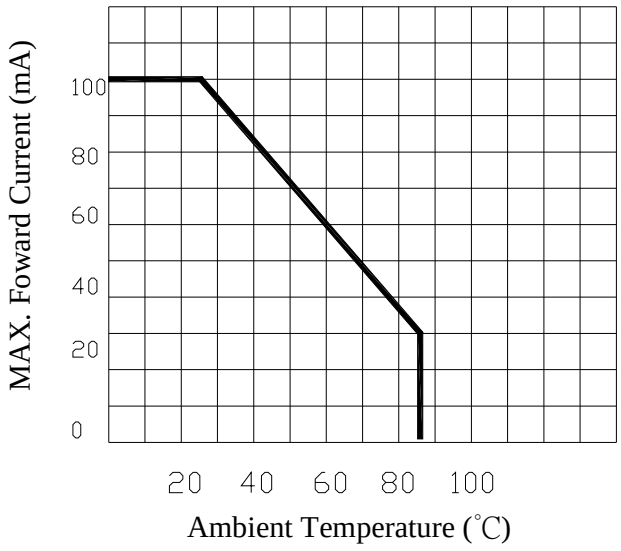
Typical Electrical / Optical Characteristics Curves :



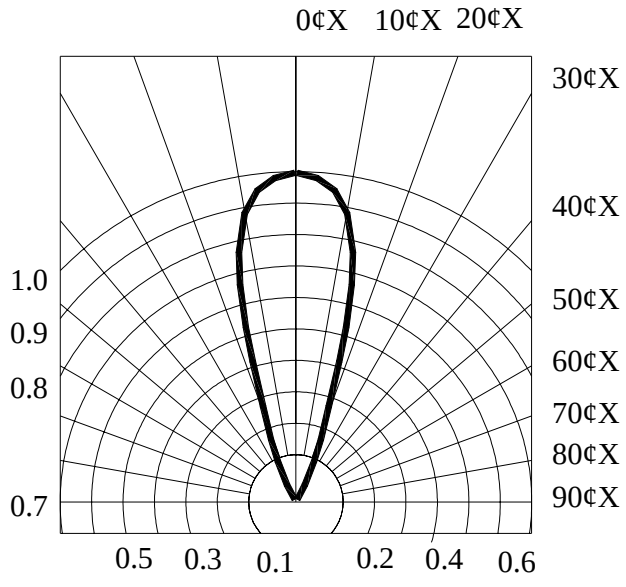
FORWARD CURRENT VS.APPLIED VOLTAGE



FORWARD CURRENT VS. LUMINOUS INTENSITY



AMBIENT TEMPERATURE VS. FORWARD CURRENT



RADIATION DIAGRAM

Reliability Test Method :

Test Item	Test Condition	Duration Time
Operation Life	If=20mA / Ta=25¢J	168hrs
Storage at High Temperature	Ta=100¢J	168hrs
Storage at Low Temperature	Ta=-40℃	168hrs
Storage at High Temperature/High Humidity	Ta=85℃/RH=85%	168hrs
Operating at High Temperature	Ta=85℃ / If=20mA	168hrs
Operating at Low Temperature	Ta=25℃ / If=20mA	168hrs
Thermal Shock	Ta/T=100¢J/30min~ -40¢J/30min	10 cycles
Solderability	Tsol=230℃	5 sec

Criteria for Judging The Damage:

Item	Symbol	Test Condition	Criteria for Judgment	
			Min.	Max.
Forward Voltage	Vf	If=20mA	-----	Initial Data x1.1
Reverse Current	Ir	Vr=5V	-----	100 μA
Luminous Intensity	Iv	If=20mA	Initial Data x0.8	-----