

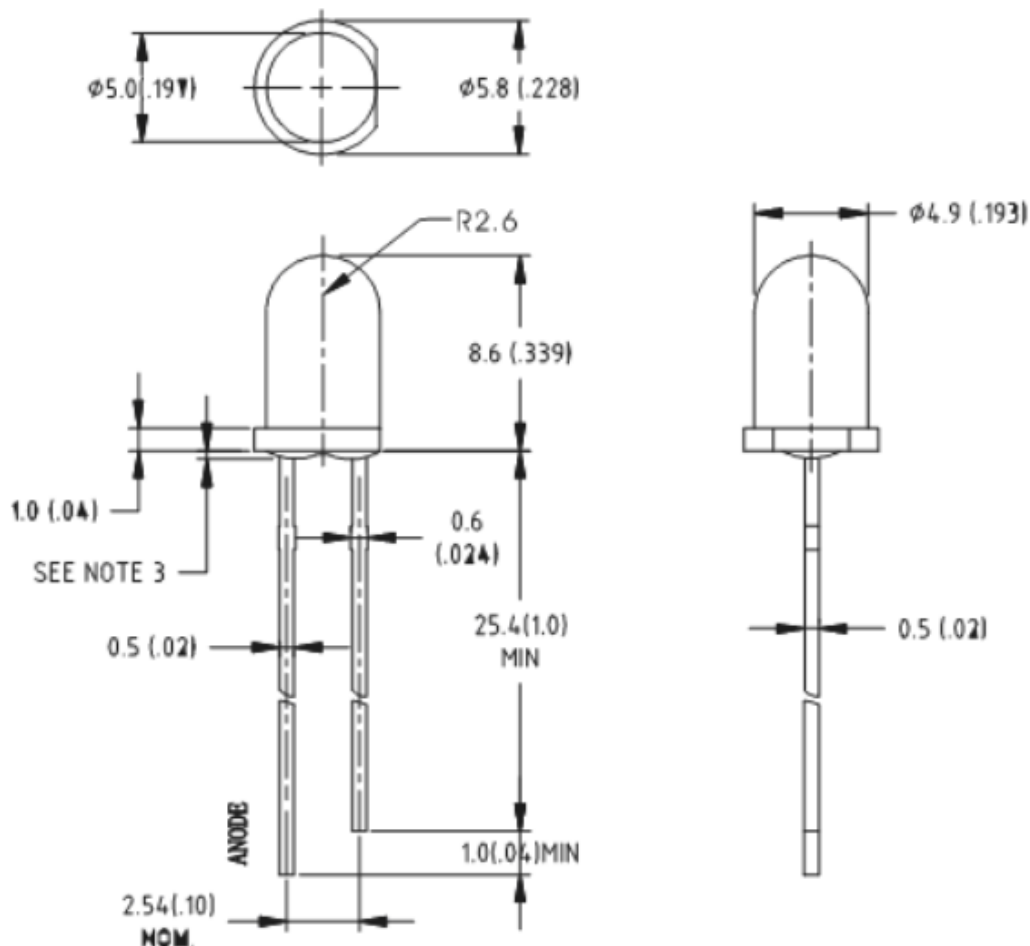
Features:

1. Popular T-1 3/4 diameter package.
2. High efficiency
3. Selected minimum intensities
4. Reliable and robust
5. The product itself will remain within RoHS compliant Version.

Descriptions:

1. The series is specially designed for applications requiring higher brightness
2. The LED lamps are available with different colors, intensities.

Part No.	Chip Material	Lens Color	Source Color
SE-LED57060-RC77	AlGaInP	Water Clear	Ultra Red

Package Dimension:

Notes:

All dimensions are in millimeters (inches).
Tolerance is ± 0.25 mm (.010") unless otherwise noted.
Protruded resin under flange is 1.00 mm (.04") max.
Specifications are subject to change without notice.

Absolute Maximum Ratings at Ta=25°C

Parameters	Symbol	Max.	Unit
Power Dissipation	PD	78	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFP	100	mA
Forward Current	IF	30	mA
Reverse Voltage	VR	5	V
Operating Temperature Range	Topr	-40°C to +85°C	
Storage Temperature Range	Tstg	-40°C to +100°C	
Lead Soldering Temperature [4mm („157“) From Body]	Tsld	260°C for 5 Seconds	

Electrical Optical Characteristics at Ta=25°C

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity (Note 1)*	IV	5000	7000	--	mcd	IF=20mA
Viewing Angle*	2θ1/2	--	60	--	deg	(Note 2)
Peak Emission Wavelength	λp	--	625	--	nm	IF=20mA
Dominant Wavelength	λd	--	619	--	nm	IF=20mA
Spectrum Radiation Bandwidth	Δλ	--	20	--	nm	IF=20mA
Forward Voltage	VF	1.80	2.20	2.80	V	IF=20mA
Reverse Current	IR	--	--	10	μA	VR=5V

Notes:

- Luminous Intensity Measurement allowance is ± 10%.
- θ1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

Criteria For Judging The Damage:

Item	Symbol	Test Conditions	Criteria for Judgment	
			Min.	Max.
Forward Voltage	VF	IF=20mA	--	F.V.*)×1.1
Reverse Current	IR	VR=5V	--	F.V.*)×2.0
Luminous Intensity	IV	IF=20mA	F.V.*)×0.7	--

*) F.V. :First Value.

Reliability Test Items And Conditions:

The reliability of products shall be satisfied with items listed below:

Confidence level: 90%.

LTPD: 10%.

Test Items and Results

Test Item	Standard Test Method	Test Conditions	Note	Number of Damaged
Resistance to Soldering Heat	JEITA ED-4701 300 302	Tsld=260±5°C, 10sec 3mm from the base of the epoxy bulb	1 time	0/100
Solder ability	JEITA ED-4701 300 303	Tsld=235±5°C, 5sec(using flux)	1 time over 95%	0/100
Thermal Shock	JEITA ED-4701 300 307	0°C~100°C 15sec, 15sec	100 cycles	0/100
Temperature Cycle	JEITA ED-4701 100 105	-40°C~25°C~100°C~25°C 30min,5min,30min,5min	100 cycles	0/100
Moisture Resistance Cylux	JEITA ED-4701 200 203	25°C~65°C~-10°C 90%RH 24hrs/1cycle	10 cycles	0/100
High Temperature Storage	JEITA ED-4701 200 201	Ta=100°C	1000hrs	0/100
Terminal Strength (Pull test)	JEITA ED-4701 400 401	Load 10N (1kgf) 10±1sec	No noticeable damage	0/100
Terminal Strength (bending test)	JEITA ED-4701 400 401	Load 5N (0.5kgf) 0°~90°~0° bend 2 times	No noticeable damage	0/100
Temperature Humidity Storage	JEITA ED-4701 100 103	Ta=60°C, RH=90%	1000hrs	0/100
Low Temperature Storage	JEITA ED-4701 200 202	Ta=-40°C	1000hrs	0/100
Steady State Operating Life		Ta=25°C, IF=30mA	1000hrs	0/100
Steady State Operating Life of High Humidity Heat		Ta=60°C,RH=90%, IF=30mA	500hrs	0/100
Steady State Operating Life of Low Temperature		Ta=-30°C, IF=20mA	1000hrs	0/100

Typical Electrical / Optical Characteristics Curves
(25°C Ambient Temperature Unless Otherwise Noted)

