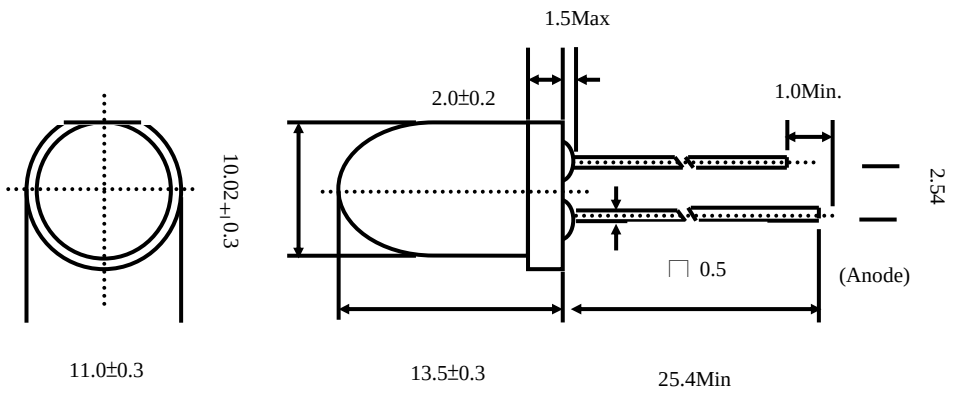
Part No. AL-103TOC Diff No.

10 mm ROUND Type LED Lamps

Package Dimension:



Notes:
1. All dimensions are in millimeter.
2.An epoxy meniscus may extend about.
1. 5mm(0.059") down to the lead
3.Tolerances unless Dimension ±0.25mm

■ Features:

- Choice of various viewing angles.
- Available on tape and reel.
- Reliable and robust

■ Descriptions

- The series is specially designed for application requiring higher brightness.
- The LED lamps are available with different color, intensities, epoxy colors etc.

■ Applications:

- TV set
- Monitor
- Telephone

Part No. AL-103TOC Diff No.

10 mm ROUND Type LED Lamps

PART NO.	Chip		Lens Color
	Material	Emitted Color	
AL-103TOC	AlInGaP	ULTRA BRIGHT ORANGE	WATER CLEAR

■ Absolute Maximum Ratings at Ta=25° C

Parameter	Symbol	Rating	Unit
Continuous Forward Current	IF	50	mA
Operating Temperature	Topr	-40 to +85	° C
Storage Temperature	Tstg	-40 to +85	° C
Soldering Temperature	Tsol	260 ±5	° C
Electrostatic Discharge	ESD	1000	V
Power Dissipation	Pd	130	mW
Peak Forward Current (Duty 1/10@1KHz)	IF(Peak)	150	mA
Reverse Voltage	VR	5	V

■ Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	IV	6300	9000	／	mcd	IF=20mA
Viewing Angle	2θ 1/2	／	20	／	deg	IF=20mA
Peak Wavelength	λ p	／	605	／	nm	IF=20mA
Dominant Wavelength	λ d	／	610	／	nm	IF=20mA
Spectrum Radiation Bandwidth	△ λ	／	20	／	nm	IF=20mA
Forward Voltage	VF	／	2.4	3.0	V	IF=20mA
Reverse Current	IR	／	／	10	μA	VR=5V

Part No. AL-103TOC Diff No.

10 mm ROUND Type LED Lamps

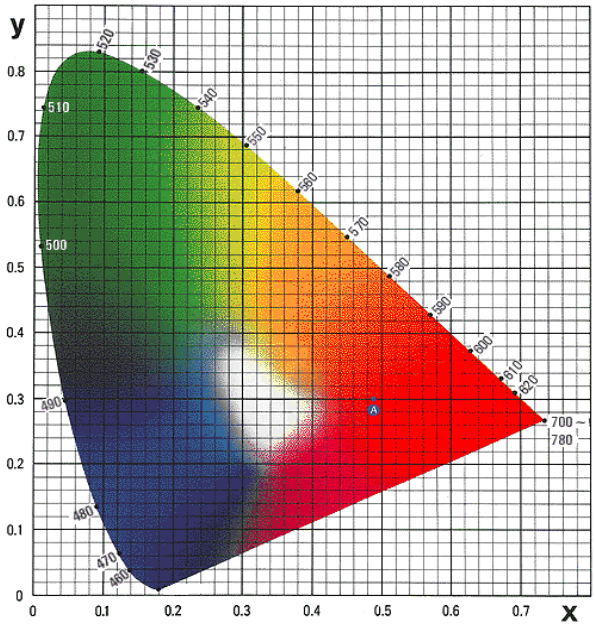
■ Reliability test items and conditions :

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260° C ±5 ° C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H:+85° C 30min ∫ 5min L:-55° C 30min	50 CYCLES	76 PCS	0/1
3	Thermal Shock	H:+100° C 5min ∫ 10set L:-10° C 5min	50 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100° C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55° C	1000 HRS	76 PCS	0/1
6	DC Operating Life	TEMP :25° C IF=20mA	1000 HRS	76 PCS	0/1
7	High Temperature/High Humidity	85° C/85%RH	1000 HRS	76 PCS	0/1

Part No. AL-103TOC Diff No.

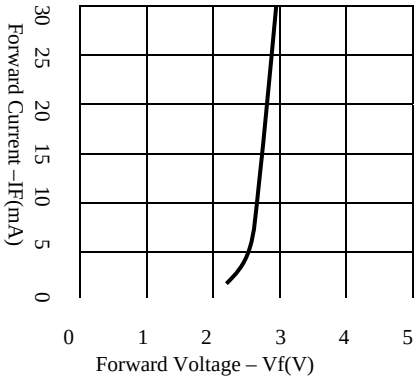
10 mm ROUND Type LED Lamps

I CHROMATICITY DIAGRAM

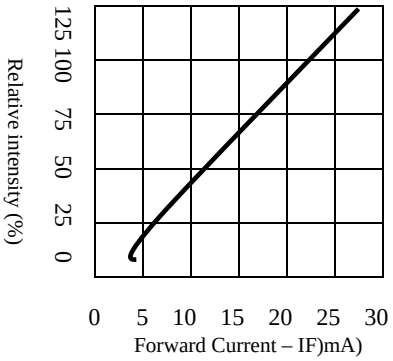


★ CHARACTERISTICS DIAGRAMS

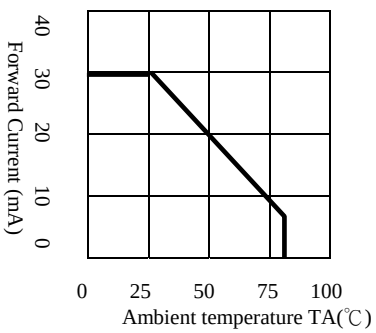
Forward Current VS. Forward Voltage



Relative Intensity VS. Forward Current



Forward Current VS. Ambient Temperature



Relative Intensity VS. Ambient Temperature

