

A-BRIGHT A-BRIGHT INDUSTRIAL CO., LTD.

Part No. **AL-V7K3AYT**

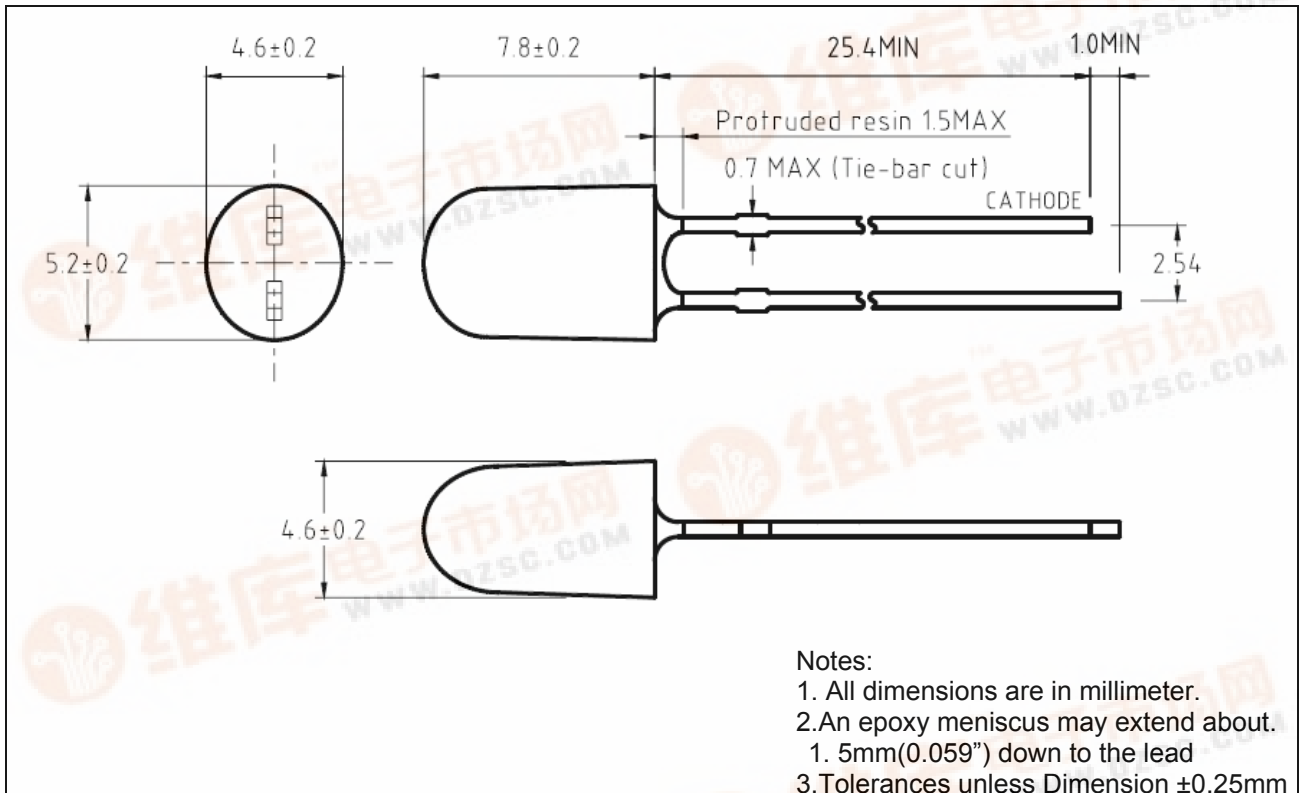
Diff No.

4.6x5.2 mm

Oval

Type : LED Lamps

Package Dimension :



■ 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 colors, intensity, epoxy colors etc.

■ Applications :

- TV set
- Monitor
- Telephone

Part No.	AL-V7K3AYT	Diff No.
4.6x5.2 mm	Oval	Type : LED Lamps

PART NO.	Chip		Lens Color
	Material	Emitted Color	
AL-V7K3AYT	AlGaInP	Yellow	Yellow Transparent

■ Absolute Maximum Ratings at Ta=25

Parameter	Symbol	Rating	Unit
Continue Forward Current	I _F	50	mA
Operating Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T _{stg}	-40 to +100	°C
Soldering Temperature	T _{sol}	260 ± 5	°C
Power Dissipation	P _D	120	mW
Peak Forward Current (Duty 1/10@1KHz)	I _F (Peak)	200	mA
Reverse Voltage	V _R	5	V

Solder temperature 1.6mm from body for 3 second at 260°C.

■ Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I _V	/	700	/	mcd	I _F =20mA
Viewing Angle	2θ1/2	/	70 / 30	/	deg	I _F =20mA
Peak Wavelength	λ _p	/	590	/	nm	I _F =20mA
Dominant Wavelength	λ _d	/	585	/	nm	I _F =20mA
Spectrum Radiation Bandwidth	△λ	/	20	/	nm	I _F =20mA
Forward Voltage	V _F	/	2.0	2.4	V	I _F =20mA

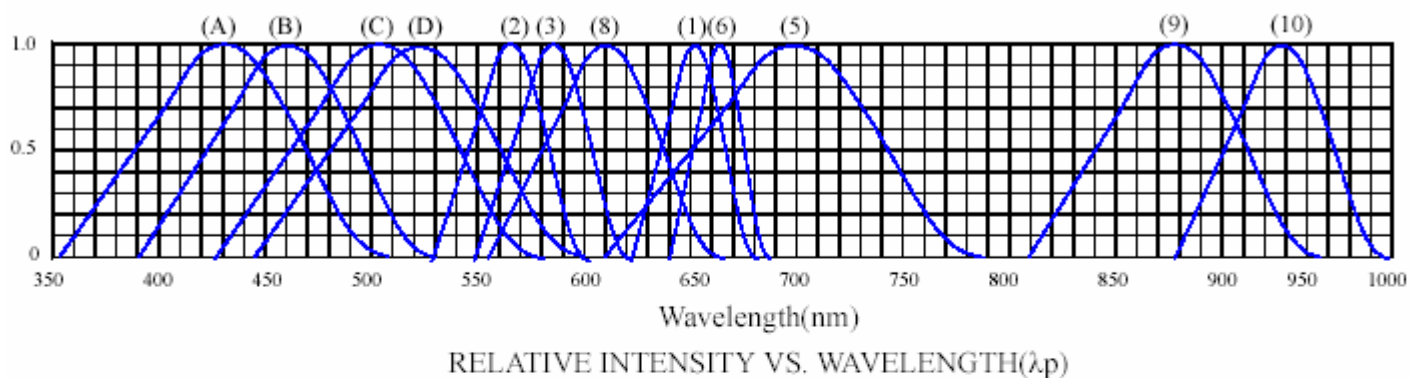
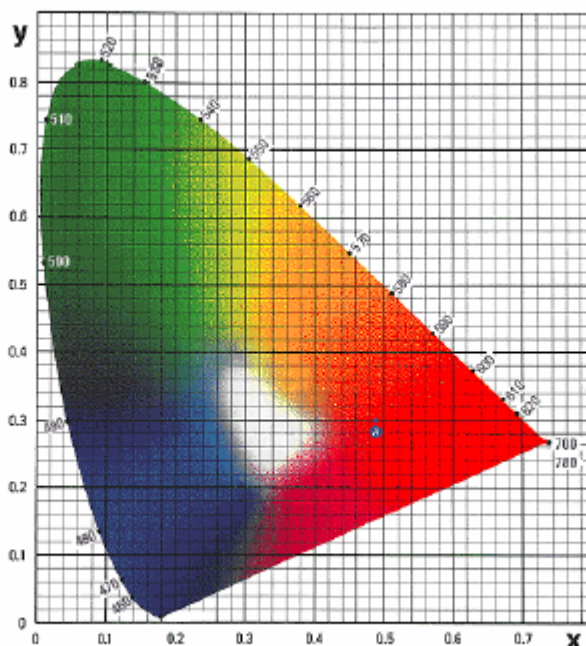
Part No.	AL-V7K3AYT	Diff No.
4.6x5.2 mm	Oval	Type : LED Lamps

■ 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 I _F =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-V7K3AYT	Diff No.
4.6x5.2 mm	Oval	Type : LED Lamps

◆ TYPICAL ELECTRICAL-OPTICAL CHARACTERISTICS CURVES



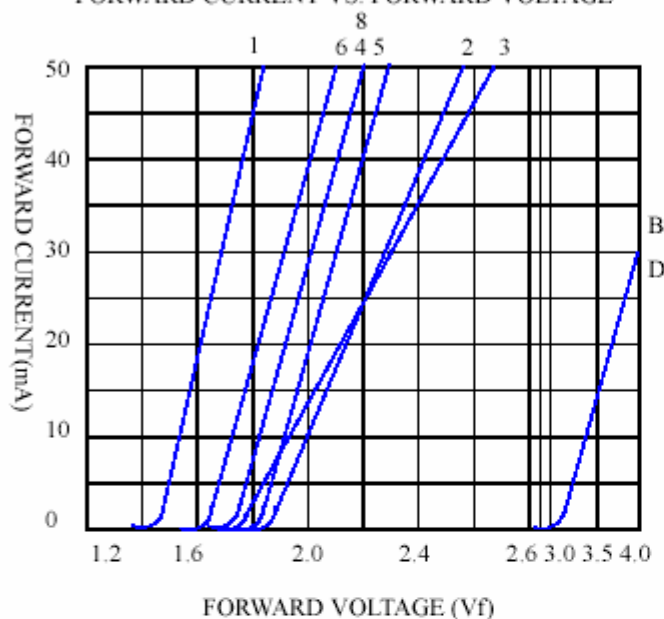
- (1) GaAsP/GaAs 655nm/Red
- (2) GaP 568nm/ Yellow Green
- (3) GaAsP/GaP 585nm/Yellow
- (4) GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) GaP 700nm/Bright Red
- (6) GaAlAs/GaAs 660nm/Super Red
- (8) GaAsP/GaP 610nm/Super Red

- (9)- GaAlAs 880nm
- (10)-GaAs/GaAs&GaAlAs/GaAs 940nm
- (A)- GaN 430nm/Blue
- (B)- InGaN 470nm/Blue
- (C)- InGaN 502nm/Ultra Green
- (D)- InGaN 523nm/Ultra Green

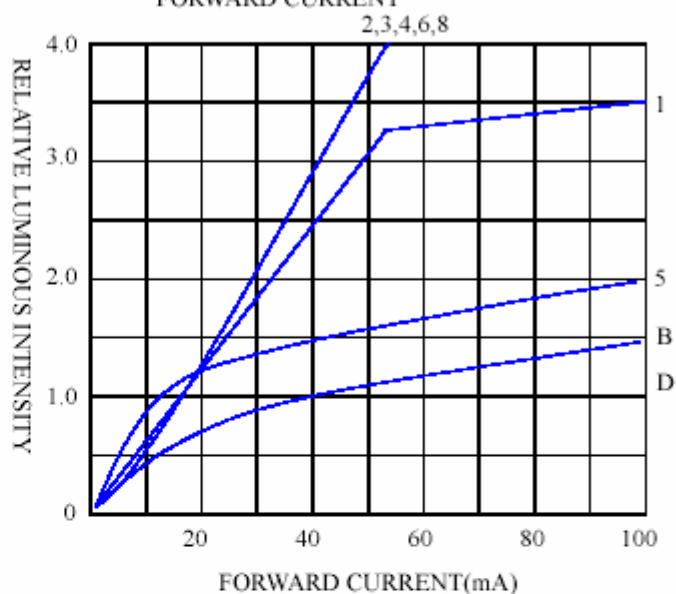
Part No.	AL-V7K3AYT	Diff No.
4.6x5.2 mm	Oval	Type : LED Lamps

◆ CHARACTERISTICS DIAGRAMS

FORWARD CURRENT VS. FORWARD VOLTAGE



RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



FORWARD CURRENT VS. AMBIENT TEMPERATURE

