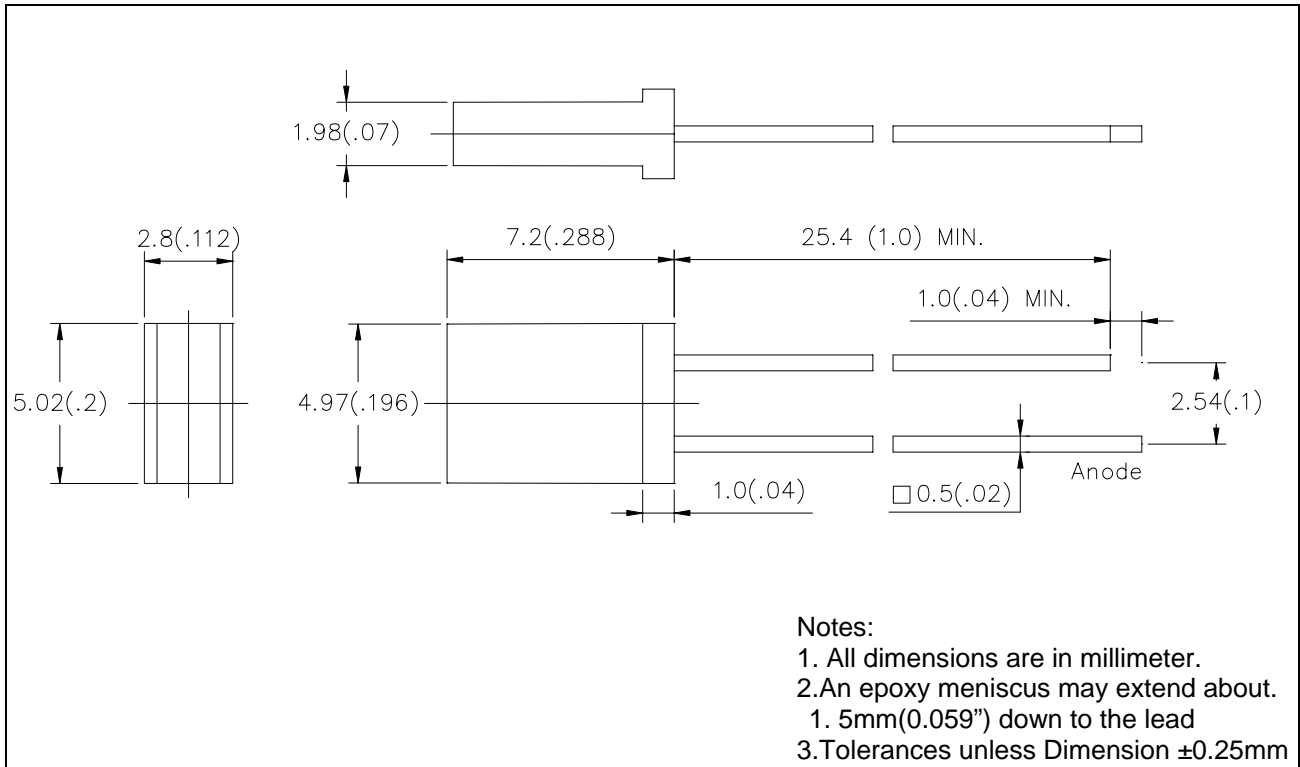


Part No.	<b>ZD0230</b>	Diff No. 004
2x5x7 mm	Rectangular	Type : LED Lamps

**Package Dimension :**



- |  |   |  |
|--|---|--|
| <p>■ Features :</p> <ul style="list-style-type: none"> <li>● Choice of various viewing angles.</li> <li>● Available on Tape and Reel.</li> <li>● Reliable and robust.</li> </ul> | <p>■ Descriptions :</p> <ul style="list-style-type: none"> <li>● The series is specially designed for application requiring higher brightness.</li> <li>● The LED lamps are available with different color, intensities, epoxy colors etc.</li> </ul> | <p>■ Applications :</p> <ul style="list-style-type: none"> <li>● TV set</li> <li>● Monitor</li> <li>● Telephone</li> </ul> |
|--|---|--|

Part No.	<b>ZD0230</b>	Diff No. 004
2x5x7 mm	Rectangular	Type : LED Lamps

PART NO.	Chip		Lens Color
	Material	Emitted Color	
AL-R253HD-004	GaP	Red	Red Diffused

■ Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Continuous Forward Current	$I_F$	20	mA
Operating Temperature	$T_{opr}$	-25 to +80	°C
Storage Temperature	$T_{stg}$	-40 to +100	°C
Soldering Temperature	$T_{sol}$	260 ± 5	°C
Electrostatic Discharge	ESD	1000	V
Power Dissipation	$P_D$	100	mW
Peak Forward Current (Duty 1/10@1KHz)	$I_F$ (Peak)	100	mA
Reverse Voltage	$V_R$	5	V

■ Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	$I_V$	4	5	/	mcd	$I_F=20mA$
Viewing Angle	2θ1/2	/	155	/	deg	$I_F=20mA$
Peak Wavelength	$\lambda_p$	/	648	/	nm	$I_F=20mA$
Dominant Wavelength	$\lambda_d$	/	643	/	nm	$I_F=20mA$
Spectrum Radiation Bandwidth	$\Delta \lambda$	/	100	/	nm	$I_F=20mA$
Forward Voltage	$V_F$	/	2.3	2.6	V	$I_F=20mA$
Reverse Current	$I_R$	/	/	50	μA	$V_R=5V$

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Part No. **ZD0230** Diff No. 004  
 2x5x7 mm Rectangular Type : LED Lamps

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■ 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 <sub>F</sub> =20mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C / 85%RH	1000 HRS	76 PCS	0/1

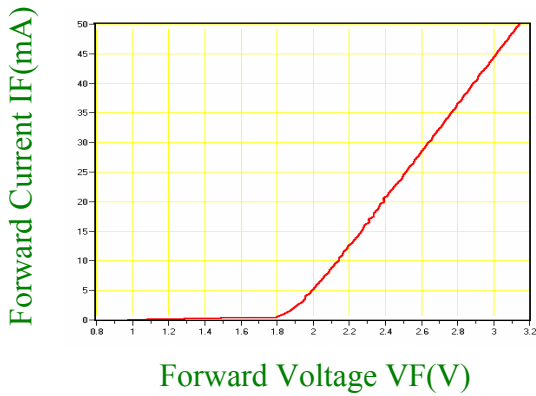
Part No.  
2x5x7 mm

**ZD0230**  
Rectangular

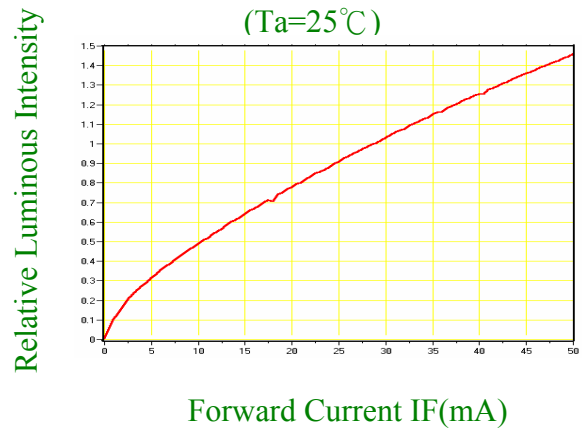
Diff No. 004  
Type : LED Lamps

■ Typical Characteristics (The data typical , and the value is not guaranteed.)

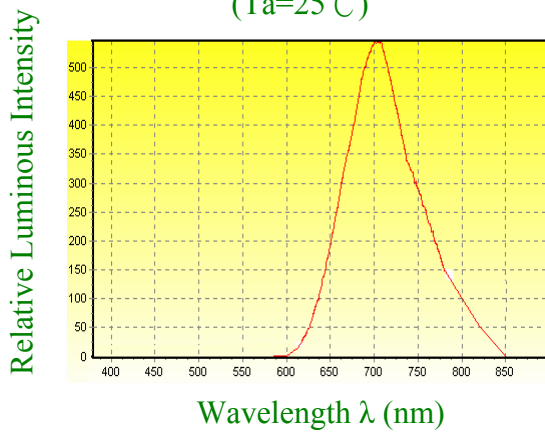
IF-VF(Ta=25°C)



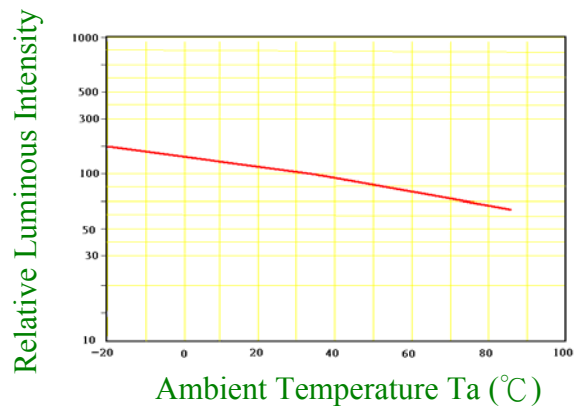
Relative Luminous Intensity-IF



Wavelength Characteristics  
(Ta=25°C)



Relative Luminous Intensity-Ta



IF-Ta

