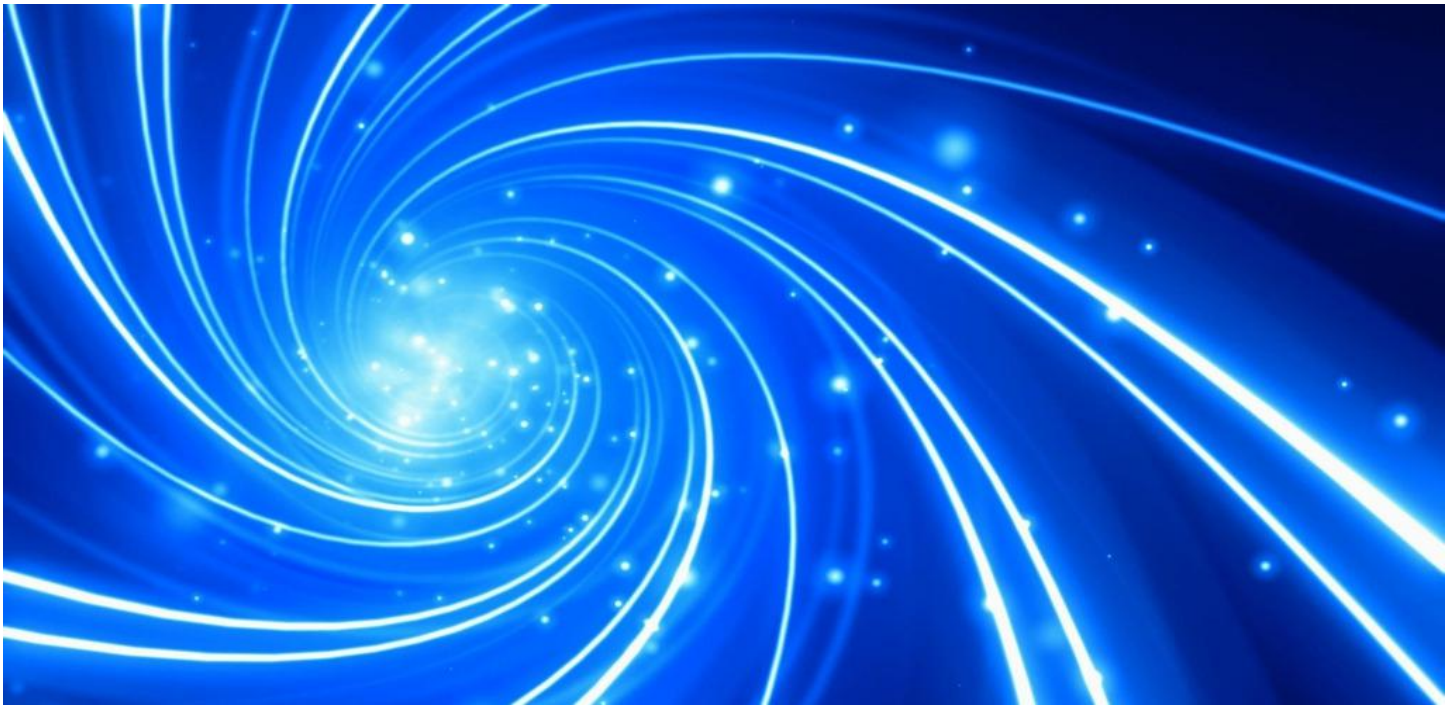
SunpuLED



Better LED, Better Life

Product Acknowledgment

Manufacturers		Client Confirm（Quality）	Client Confirm（R & D）
Prepared			
Audit			
Approve			
After both sides confirmed the Acknowledgment qualified,must be signed and sealed			
Supply-side Address ： No 150.XinHui Road，Hi-TechPark,Ningbo,china			
Tel： 0574-87740939			

LED SPECIFICATION

Part No：P35B-405A0101-0201AD-B

Features:

High brightness、high reliability、long life

Light angle：120°

Typical wavelength：400-410nm

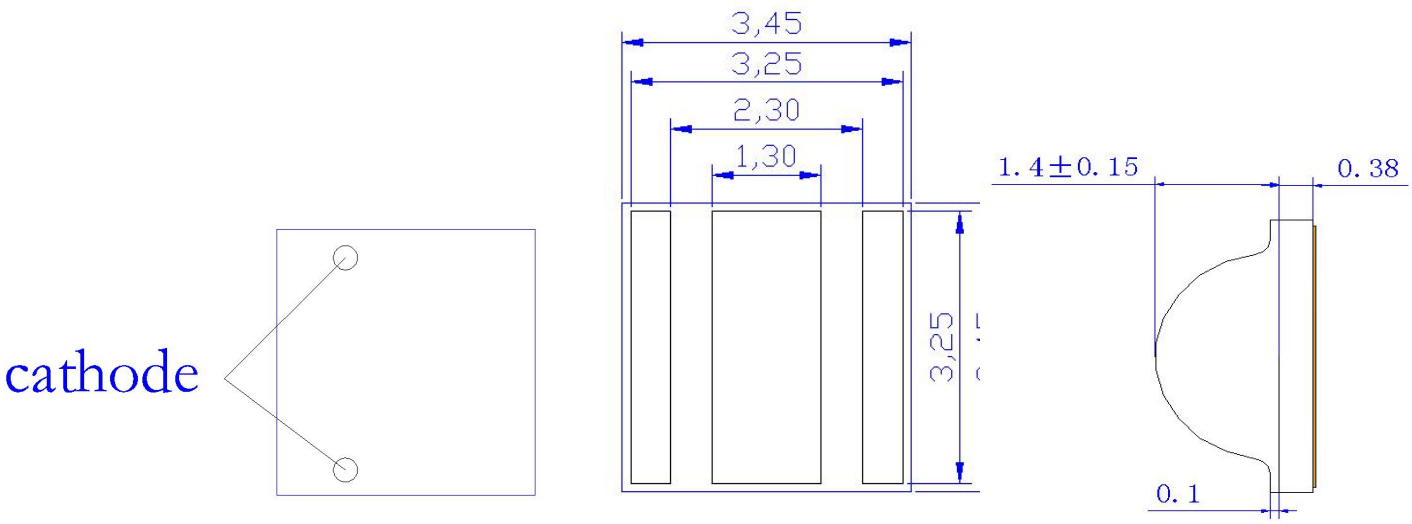
product presentation:

This series of products with high reliability of alumina ceramic substrate, with high brightness, high density, long service life, low depreciation, etc., is an ideal choice for outdoor high requirements of products.

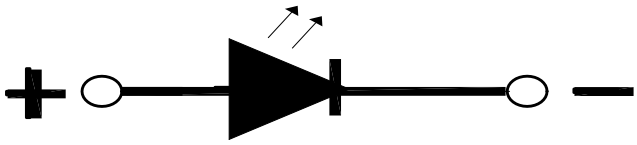
LED SPECIFICATION

Part No：P35B-405A0101-0201AD-B

Outline dimensions:



Circuit structure:



1 P 1 S

NOTES:

All dimensions are in millimeters.

Tolerance is ±0.1mm unless otherwise noted.

It is strongly recommended that the temperature of TS （Welding plate ）is not higher than 85℃.

LED SPECIFICATION

Part No：P35B-405A0101-0201AD-B

Limit parameter（Ta = 25℃）

Parameter	Symbol	Test Condition	Value		Unit
			Min.	Max.	
DC Forward Current	I_f	Tc = 25℃	----	500	mA
Reverse voltage	V_r	Tc = 25℃	3.0	4.0	V
LED Junction Temperature	T_j	----	----	125	℃
Operating Temperature	T_{opr}	----	-40	+85	℃
Storage Temperature	T_{str}	----	0	+40	℃
Soldering temperature	----	----	260° for 5seconds max		

Photoelectric parameters （Ta = 25℃）

wavelength	Item	Symbol	Test	Min	Typ	Max	Unit
405nm	Forward Voltage	V_F	IF=500mA	3.0	3.3	4.0	V
	Peak wavelength	Wp		400	--	410	nm
	Radiometric Flux	Φ_{typ}		800	850	900	mW
	Electric power	W		--	2	--	W

Part No：P35B-405A0101-0201AD-B

Typical curve

Fig.1 Forward Current(mA) Vs Forward Voltage(V)

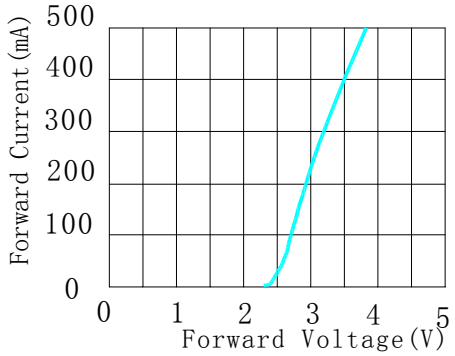


Fig.2 Relative Intensity Vs Forward Current (mA)

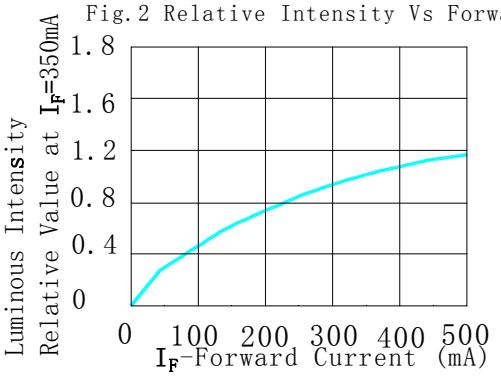


Fig.3 Forward Current Vs Ambient Temperature

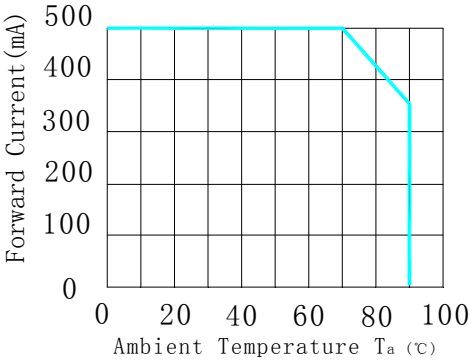
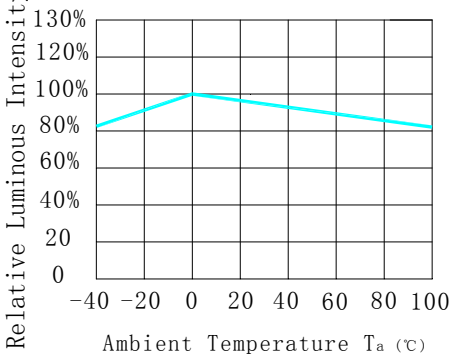
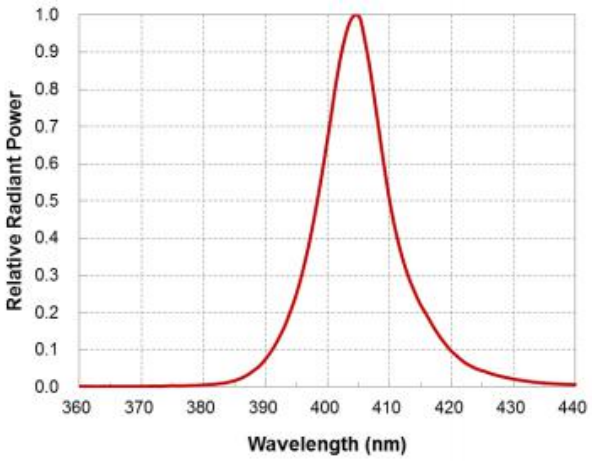


Fig.4 Relative Intensity Vs Ambient Temperature



Optical Characteristics



Part No：P35B-405A0101-0201AD-B

Reliability Tests and Results

Test	Reference Standard	Test Conditions	Test Duration	Units Failed/Tested
Temperature Cycle	JEITA ED-4701 100 105 or MIL-STD-202G	-40℃(30min)~25℃(5min)~100℃(30min)~25℃(5min)or -40℃(30min) ~ 100℃(30min)	100cycles	0/10
High Temperature Storage	JEITA ED-4701 200 201	T_A=90℃	1000hours	0/10
HighTemperature Humidity Storage	JEITA ED-4701 100 103	T_A=85℃ RH=90%	1000hours	0/10
Low Temperature Storage	JEITA ED-4701 200 202	T_A=-40℃	1000hours	0/10
High Temperature Operating Life	JESD22-A108D	TC=85℃ I_F=500mA	1000hours	0/10
Electrostatic Discharges	JEITA ED-4701 300 304	HBM 2KV 3KΩ 100Pf 3pulses nedative		0/10
Temperature Cycle *1	Sunpu-opto	-40℃(30min)~ (90s)~110℃(30min) ~ (90s) -40℃	300cycles	0/10
Temperature Humidity Storage*2	Sunpu-opto	T_A=85℃ RH=85% I_F=500mA	1000hours	0/10

✧ **NOTES:**

*** Measurements are performed after allowing the LEDs to return to room temperature**

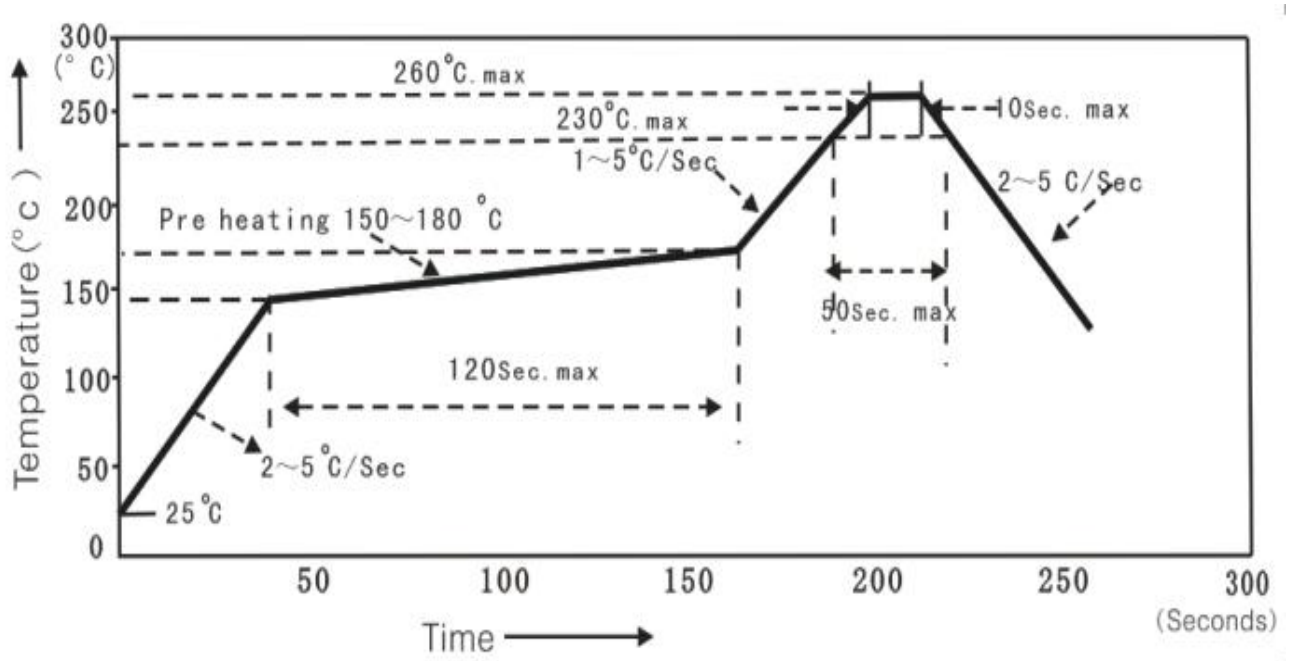
Part No：P35B-405A0101-0201AD-B

Failure Criteria

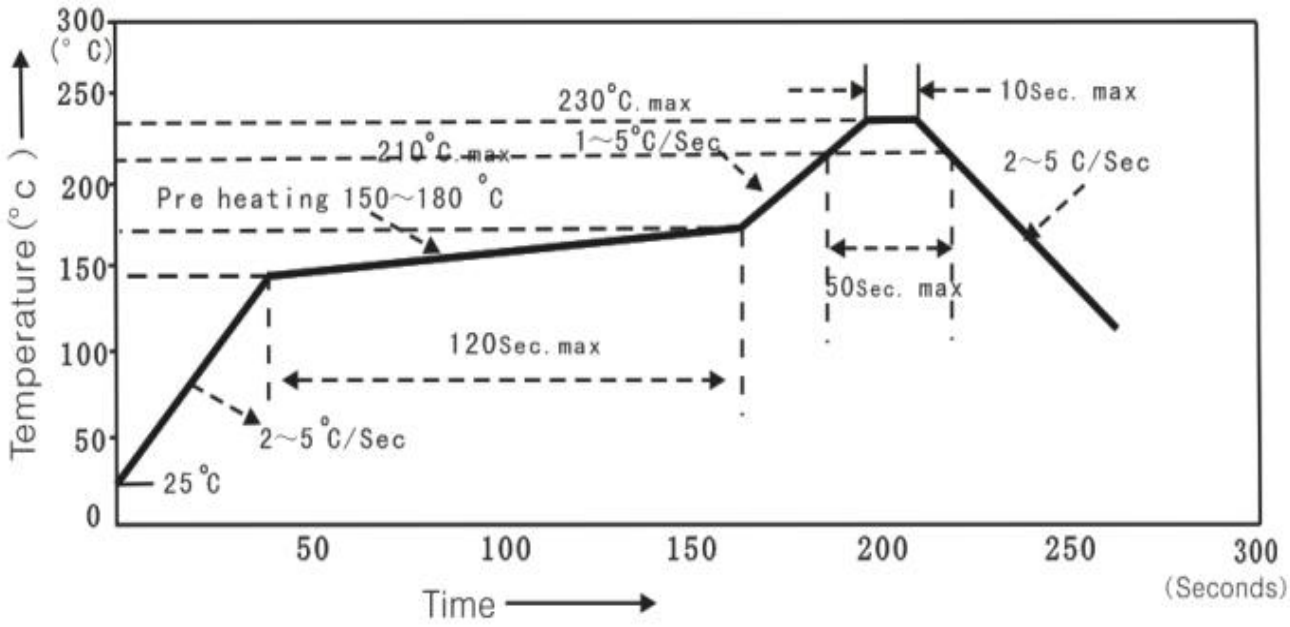
Items	Conditions	Failure Criteria
Forward Voltagd (VF)	I_F=350mA	>Initial value x 1.1
Luminous Flux (ΦV)	I_F=350mA	<Initial value x 0.7

Part No：P35B-405A0101-0201AD-B

Lead-free solder reflow curve:



Have lead solde reflow curve:



Part No：P35B-405A0101-0201AD-B

Temperature curve characteristics	Have lead solde	Lead-free solder
Average rate of tenperature increase(Tsmax-Tp)	Max 3℃/s	Max 3℃/s
Preheat：minimum temperature(Tsmin)	100℃	150℃
Prehea：maximum temperature(Tsmax)	150℃	200℃
Maintain a higher temperature：temperature (TL)	183℃	217℃
Maintain a higher temperature：：time (tL)	60-150s	60-150s
Tp/temperature	215℃	260℃
Ramp Down Rate	Max 6℃/s	Max 6℃/s
The time needed for heating up to theTp of 25 ℃	Max 6min	Max 8min

Part No：P35B-405A0101-0201AD-B

Packaging