



Hubei Kento Electronic Co., Ltd

5AR3UC12						
Typical Electrical & Optical Characteristics (Ta = 25°)						
ITEMS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	VF	IF = 20mA	1.4	1.8	2.5	V
Reverse Current	IR	VR = 5V	---	---	1.1	μA
Dominant Wavelength	λ D	IF = 20mA	620	---	630	nm
Luminous Intensity	IV	IF = 20mA	798	1088	1456	mcd
50% Power Viewing	2θ½	IF = 20mA	---	14	---	deg
Absolute Maximum Ratings at (Ta = 25°)						
ITEMS	SYMBOL	ABSOLUTE MAXIMUM RATING			UNIT	
Forward Current	IF	50			mA	
Peak Forward Current	IFP	220			mA	
Continuous Forward Current	IL	20			mA	
Reverse Voltage	VR	5			V	
Power Dissipation	PD	105			mW	
Operation Temperature	Topr	-40 ~ +80			°C	
Storage Temperature	Tstg	-40 ~ +80			°C	
Lead Soldering Temp	Tsol	Max.260°C for 5 sec Max.				

IFP Conditions Pulse Width 10msec duty 1/10

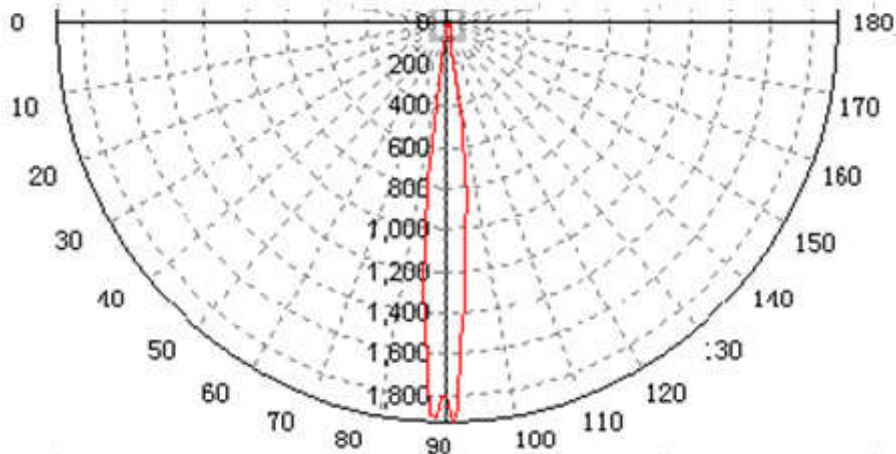
Tsol Conditions 4mm from the base of the epoxy bulb



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Spatial Distribution



Reliability Performance

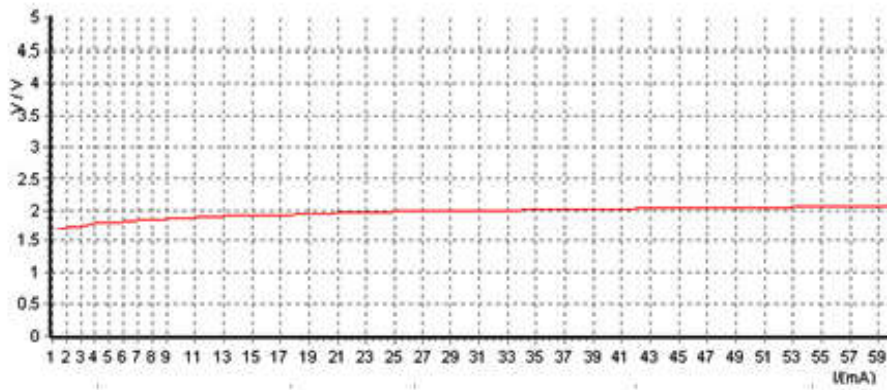
Test Classification	Test Item	Test Conditions	Test Duration	Sample Size	Standard
Life Test	Life Test	Ta=25°±5 IF=20mA	1000 hrs	10PCS	
Environment Test	Thermal Shock	-10°±5°←→+100°±5° 5min. 10sec. 5min.	100 cycles	10PCS	
	Temperature Cycle	-55°C±5°C←→+85°C±5°C 30min. 5min. 30min.	100 cycles	10PCS	
	High Temperature High Humidity	Ta=85°±5% RH =85%±0.5 %RH	240 hrs	10PCS	
	High Temperature Storage	Ta=100°±5%	1000 hrs	10PCS	
	Low Temperature Storage	Ta=-55°±5%	1000 hrs	10PCS	
Mechanical Test	Resistance to Soldering Heat	Ta=260°±5%	5 sec.	10PCS	
	Lead Integrity	0° ~ 90° ~ 0°	3 times	10PCS	



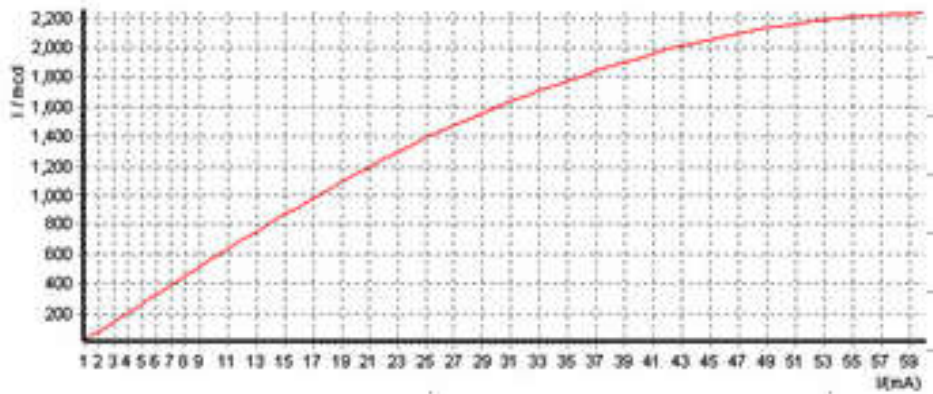
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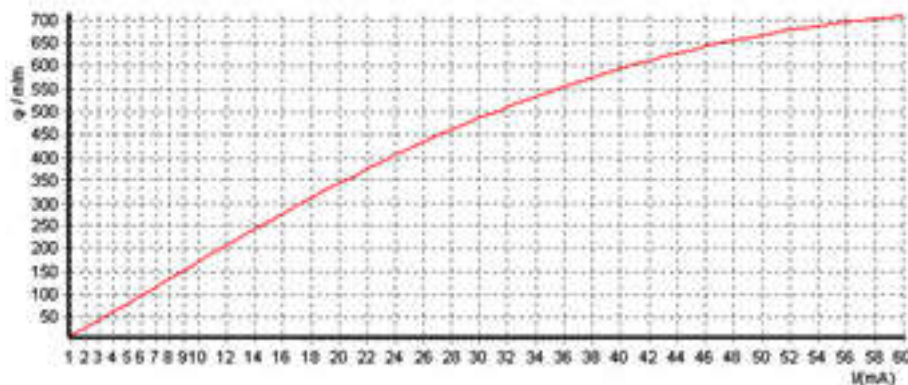
Typical Optical/Electrical Characteristics Curves (Ta=25° Unless Otherwise Noted)



Current-Voltage Curve



Current-Luminous intensity Curve

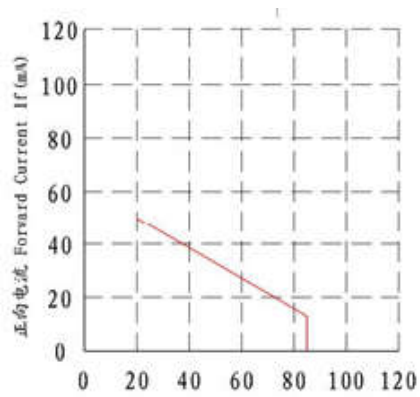


Current-Luminous flux Curve

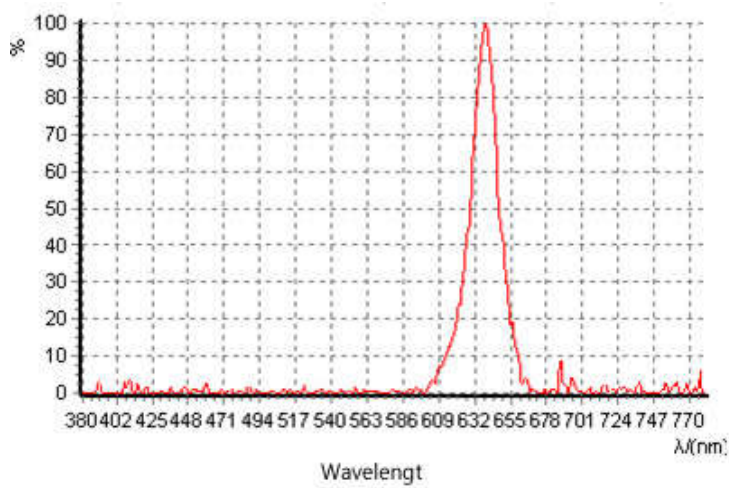


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Temperaturkurve



Wavelength

