

UV LED LAMP SPECIFICATION

Drawn by	Checked by	Approved by

Rev. 0.0



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ULP-314UWC-TAIZ35

FEATURES		PACKAGE DIMENSIONS																															
<ul style="list-style-type: none"> > Standard diameter 3mm package > Viewing angle: 40° > Package: Water Clear > High radiant power > Long life and high reliability > IC compatible > Surge-protect > Built-in Zener Diode-LED > Chip Material: GaN 		<p>Tolerance: ±0.2 Unit: mm</p>																															
<p>Absolute Maximum Ratings at Ta=25°C</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>WHITE</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>Power Dissipation</td> <td>110</td> <td>mW</td> </tr> <tr> <td>Peak forward current</td> <td>180</td> <td>mA</td> </tr> <tr> <td>Continuous forward current</td> <td>20</td> <td>mA</td> </tr> <tr> <td>Derating linear from 50°C</td> <td>0.4</td> <td>mA/°C</td> </tr> <tr> <td>Reverse voltage</td> <td>5</td> <td>V</td> </tr> <tr> <td>Operating temperature range</td> <td colspan="2">-40°C to +80°C</td> </tr> <tr> <td>Storage temperature range</td> <td colspan="2">-40°C to +80°C</td> </tr> <tr> <td>Lead soldering temperature</td> <td colspan="2">260°C for 5 Seconds</td> </tr> </tbody> </table>				Parameter	WHITE	Unit	Power Dissipation	110	mW	Peak forward current	180	mA	Continuous forward current	20	mA	Derating linear from 50°C	0.4	mA/°C	Reverse voltage	5	V	Operating temperature range	-40°C to +80°C		Storage temperature range	-40°C to +80°C		Lead soldering temperature	260°C for 5 Seconds				
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1) Results of reliability test

Test Classification	Test Item	Test Conditions	Test Duration	Sample Size	AC/RE
Life Test	Life Test	Ta=85° C±5° C IF=20mA	1,000 hrs	30 pcs	0/1
Environment	Thermal Shock Test	-10° C±5° C ↔ +100° C±5° C 5min 10sec. 5min	50 cycles	30 pcs	0/1
	Temperature cycle Test	-55° C±5° C ↔ +85° C±5° C 30min 5min 30min	50 cycles	30 pcs	0/1
	High Temp. & High Humidity Test	Ta=85° C±5° C RH=85%±0.5RH	1,000 hrs	30 pcs	0/1
	High Temp. Storage	Ta=100° C±5° C	1,000 hrs	30 pcs	0/1
	Low Temp. Storage	Ta= -55° C±5° C	1,000 hrs	30 pcs	0/1
Mechanical	Resistance to soldering Heat	Ta=260° C±5° C	5 Sec.	30 pcs	0/1
	Lead Integrity	0.5MS 0° C ~ 30° C ~ 0° C	2 Items	30 pcs	0/1

2) CRITERIA FOR JUDGING THE DAMAGE

Item	Symbol	Test Conditions	Criteria for Judgment	
			Min	Max
Forward Voltage	VF	IF=20mA	/	U.S.L+0.1
Reverse Current	IR	VR=5V	/	L.S.L+0.0
Luminous Intensity	IV	IF=20mA	L.S.L+0.7	/

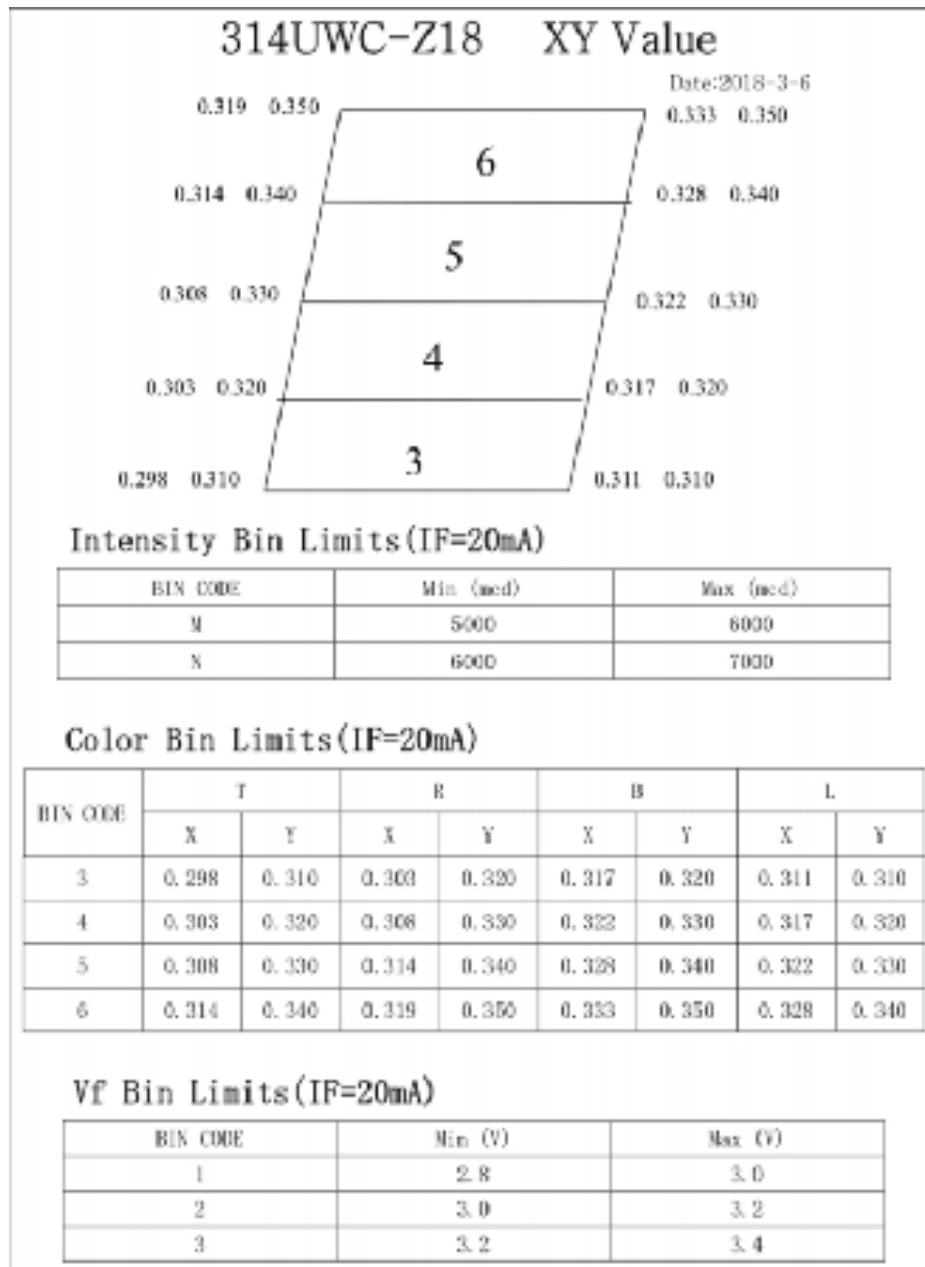
*U.S.L.:Upper Standard Level

** L.S.L.:Lower Standard Level



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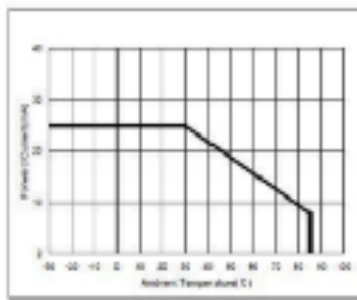


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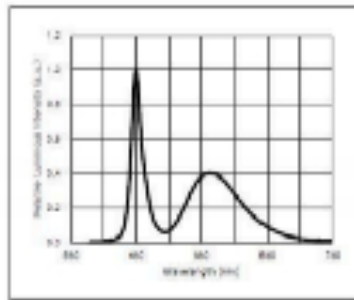
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Characteristic Curves:

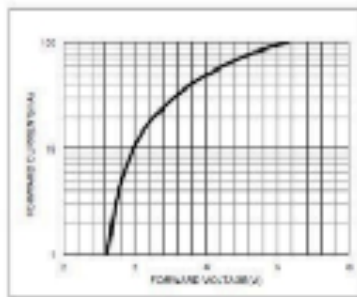
These are representative measurements for the RazerThin products. Actual curves will vary slightly for the various radiant flux and dominant wavelength bins.



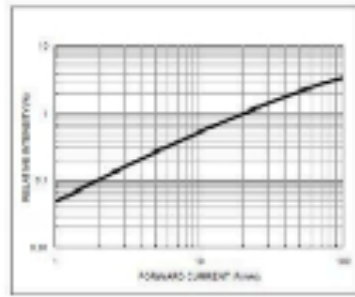
Forward Current vs. Ambient Temperature



Relative Spectral Emission



Forward Current vs. Forward Voltage



Relative Luminous Intensity vs. Forward Current

