

ARL-5513UWC-7cd Warm

FEATURES

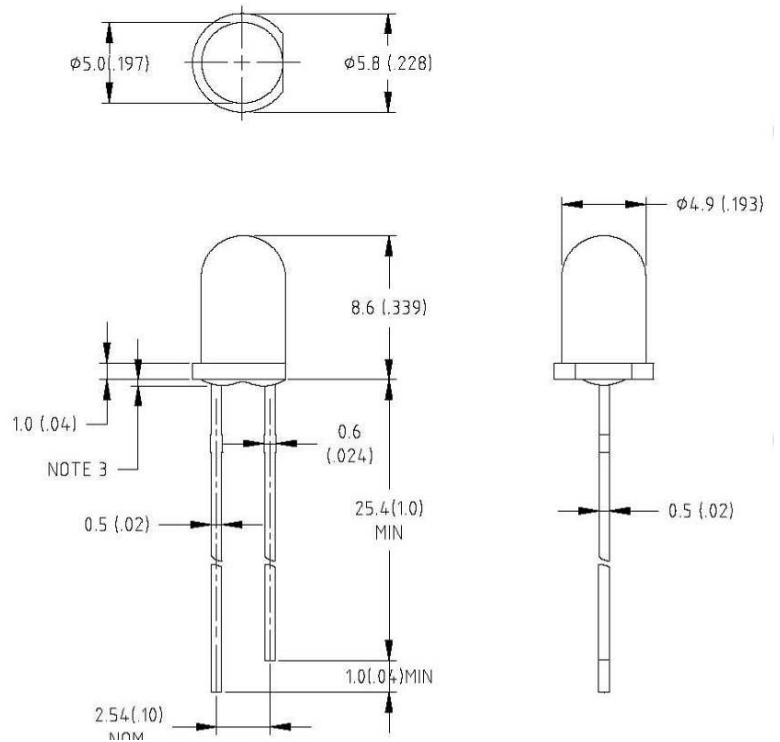
- High efficiency
- General purpose leads
- RoHS compliant



PACKAGE DIMENSIONS

NOTES

1. All dimensions are in millimeters (inches). 2. Tolerance is $\pm 0.25\text{mm}$ (.010") unless otherwise noted. 3. Protruded resin under flange is 1.0mm (.04") max. 4. Lead spacing is measured where the leads emerge from the package. 5. Specifications are subject to change without notice. 6. Precautions for ESD: STATIC SHIELD Electricity and surge damages the LED. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.



Device Selection Guide

LED Part No.	Chip		Lens Color
	Material	Emitted Color	
ARL-5513UWC-7cd Warm	InGaN	Warm White	Water clear

Absolute Maximum Rating (Ta=25°C)

Parameter	Symbol	Absolute Maximum Rating	Unit
Continuous Forward Current	I_{FPM}	20	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFM	100	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	80	mW
Derating Linear From 50°C	°C	0.4	mA
Electrostatic Discharge (ESD)		150	V
Operating Temperature	Topr	-20 ~+80	°C
Storage Temperature	Tstg	-30 ~+100	°C
Lead Soldering Temperature[4mm(.157") From Body]	Tsol	260	°C

Electro-Optical Characteristics (Ta=25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition		
Luminous Intensity	I _v	3300	7000	---	mcd	IF=20mA(Note1)		
Viewing Angle	2θ _{1/2}	---	50	---	Deg	(Note 2)		
Forward Voltage	V _F	2.8	3.5	4	V	IF=20mA		
Reverse Current	I _R	---	---	50	μA	VR=5V		
BIN Grade	Below Left		Below Right		Upper Right		Upper Left	
	x	y	x	y	x	y	x	y
BIN1(2800~3000K)	0.4208	0.3725	0.4355	0.3766	0.4683	0.4394	0.4516	0.4353
BIN2(3000~3200K)	0.4093	0.3669	0.4208	0.3725	0.4516	0.4353	0.4373	0.4311
BIN3(3200~3400K)	0.3987	0.3613	0.4093	0.3669	0.4373	0.4311	0.4245	0.4263
BIN4(3400~3600K)	0.3892	0.3555	0.3987	0.3613	0.4245	0.4263	0.4126	0.4215

Note:

- 1 Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- 2 θ/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3 Forward voltage measurement allowance is ±0.1V
- 4 Luminous Intensity Measurement Allowance is ±10%

TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

CIE 1931 Chromaticity Diagram

