

TOL- 304SWPC

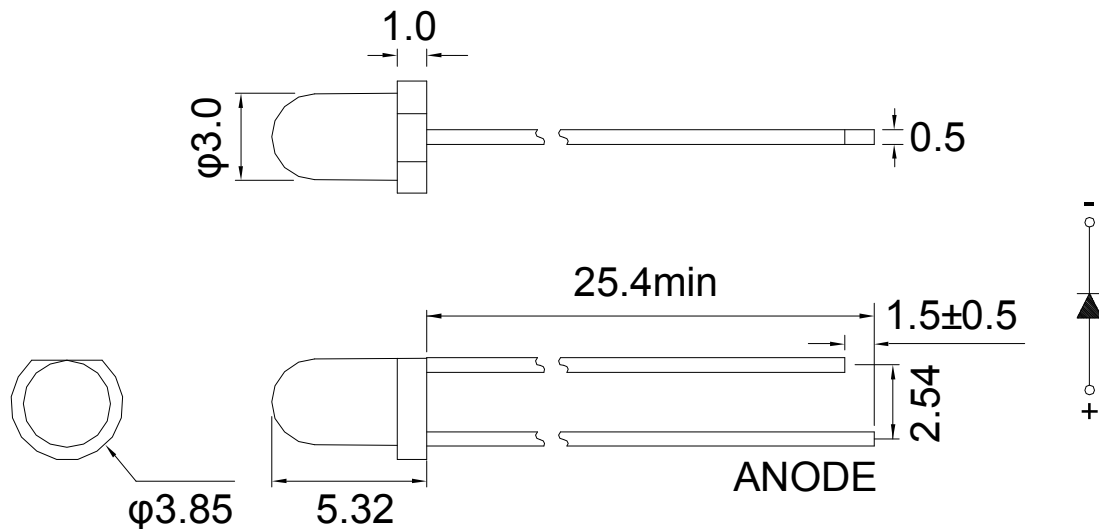
Lamp LED

Part Number	Chip		Lens Color
	Material	Source Color	
TOL-304SWPC	InGaN	White	Water Clear

Features

- I.C. compatible.
- Low power consumption.
- Compatible with wave soldering process.
- 3.0mm diameter package.
- Long life, stable and reliable.
- RoHS compliant.

Dimensions



Notes:

1. All dimensions are in millimeter.
2. Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted

Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Power Dissipation	105	mW
Continuous Forward Current	20	mA
Reverse Voltage	5	V
Operating Temperature Range	-40°C to +80°C	
Storage Temperature Range	-40°C to +100°C	
Wave Soldering Profile For Lead Free Soldering	260°C, 10 Seconds	

Electrical / Optical Characteristic @ Ta=25°C

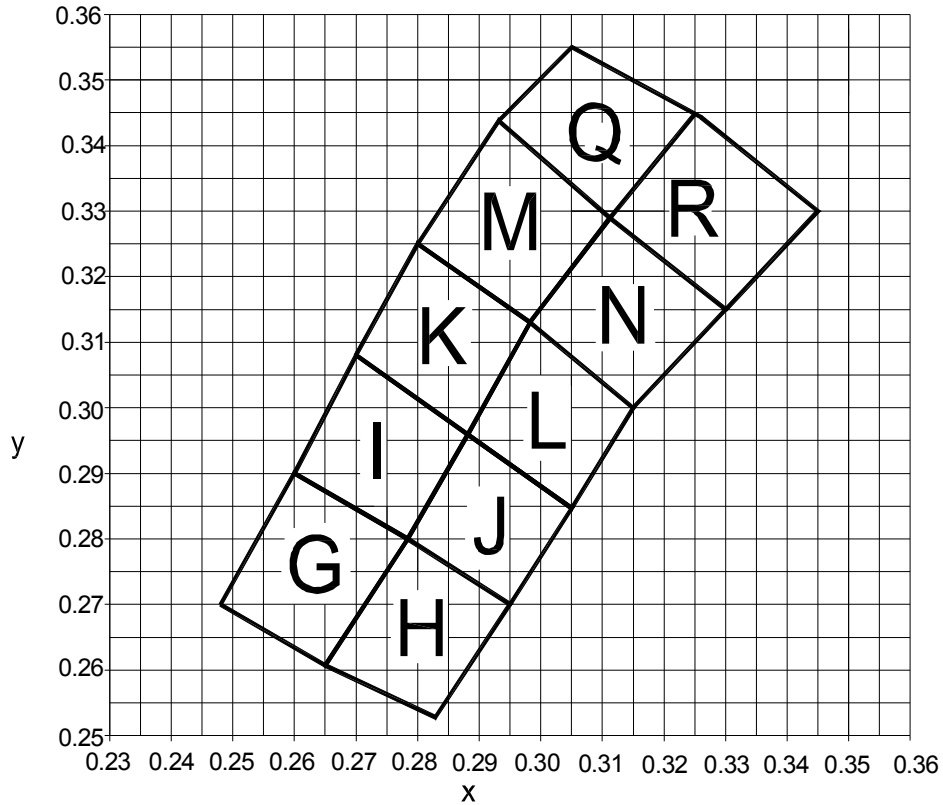
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	-	6900	-	mcd	I _F =20mA
Viewing Angle	2θ _{1/2}	-	45	-	deg	I _F =20mA
Correlated Color Temperature	T _c	-	7500	-	K	I _F =20mA
Forward Voltage	V _F	-	3.3	-	V	I _F =20mA
Reverse Current	I _R	-	-	<100	μA	V _R =5V
Chromaticity Coordinates	X	-	0.30	-	-	I _F =20mA
	Y	-	0.31	-	-	I _F =20mA

Bin Code List for Reference

Luminous Intensity		Unit : mcd@20mA	
Bin Code	Min	Max	
B45	5500	6200	
B46	6200	6900	
B47	6900	7700	
B48	7700	8600	

Tolerance of Luminous Intensity on each bin is ±11%

Chromaticity Diagram



	1(X,Y)	2(X,Y)	3(X,Y)	4(X,Y)
G	(0.248,0.270)	(0.260,0.290)	(0.278,0.280)	(0.265,0.261)
H	(0.265,0.261)	(0.278,0.280)	(0.295,0.270)	(0.283,0.253)
I	(0.260,0.290)	(0.270,0.308)	(0.288,0.296)	(0.278,0.280)
J	(0.278,0.280)	(0.288,0.296)	(0.305,0.285)	(0.295,0.270)
K	(0.270,0.308)	(0.280,0.325)	(0.298,0.313)	(0.288,0.296)
L	(0.288,0.296)	(0.298,0.313)	(0.315,0.300)	(0.305,0.285)
M	(0.280,0.325)	(0.293,0.343)	(0.311,0.329)	(0.298,0.313)
N	(0.298,0.313)	(0.311,0.329)	(0.330,0.315)	(0.315,0.300)
Q	(0.293,0.343)	(0.305,0.360)	(0.325,0.345)	(0.311,0.329)
R	(0.311,0.329)	(0.325,0.345)	(0.345,0.330)	(0.330,0.315)

* Color Coordinates Measurement allowance is ± 0.01 .

Forward Voltage		Unit : V@20mA	
Bin Code	Min	Max	
19	2.8	2.9	
20	2.9	3.0	
21	3.0	3.1	
22	3.1	3.2	
23	3.2	3.3	
24	3.3	3.4	
25	3.4	3.5	
26	3.5	3.6	

Tolerance for each Forward Voltage Bin is $\pm 0.1V$