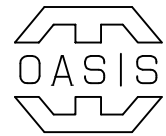


TAIWAN OASIS LED DATA SHEET

Part No.TOL-502SWQC-ES017-1



- ◆ Pb Free Products.
- ◆ Ultra White Emitting LED.
- ◆ High Efficiency LED, $\phi 5\text{mm}$, Water Clear Package.
- ◆ The device is made with InGaN/GaN Light Emitting Diode .
- ◆ RoHS compliant

Under Development	
Mass Production	●

Absolute Maximum Ratings

$T_{amb}=25^{\circ}\text{C}$, unless otherwise specified

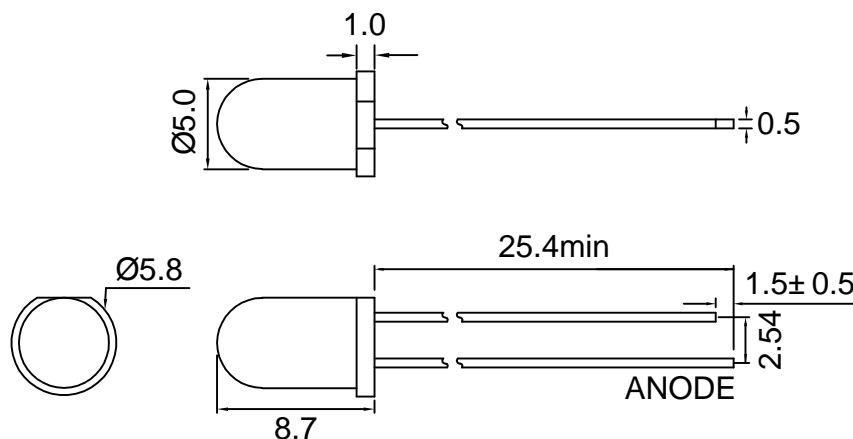
Parameter	Test Condition	Symbol	Value	Unit
DC Forward Current		I_f	20	mA
Peak Forward Current	1/10 duty cycle@1kHz	I_{fp}	100	mA
Power Dissipation	$T_{amb}\leq 60^{\circ}\text{C}$	P_v	105	mW
Junction Temperature		T_j	85	$^{\circ}\text{C}$
Operating Temperature Range		T_{amb}	-40~85	$^{\circ}\text{C}$
Storage Temperature Range		T_{stg}	-40~100	$^{\circ}\text{C}$
Soldering Temperature	$3\leq t\leq 5\text{s}$, 2mm from body	T_{sd}	260	$^{\circ}\text{C}$

Optical and Electrical Characteristics

$T_{amb}=25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	$I_f=20\text{mA}$	V_f	2.8	3.2	3.6	V
Reverse Current	$V_r=5\text{V}$	I_r			10	μA
Luminous Intensity	$I_f=20\text{mA}$	I_v		11800		mcd
Full Viewing Angle	$I_f=20\text{mA}$	$2\theta_{1/2}$		15		deg.
Chromaticity Coordinates	$I_f=20\text{mA}$	x		0.30		
	$I_f=20\text{mA}$	y		0.31		

Package Dimensions & Internal Circuit Diagram

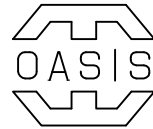


Unit	mm
Scale	—
Rev.	draft
Tolerance	± 0.25 angle $\pm 5^{\circ}$

Drawer	Linmq
Checked	
Approved	

We reserve the right to change to improve technical design and may do so without further notice.

TAIWAN OASIS LED DATA SHEET



Part No.TOL-502SWQC-ES017-1

Bin Code list

Luminous Intensity
Unit: mcd@20mA

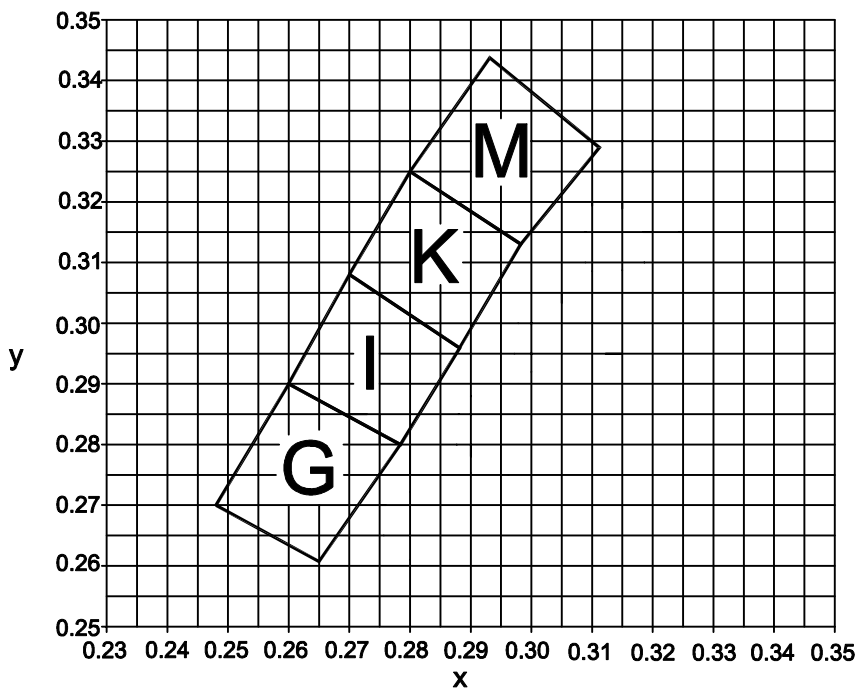
Bin code	MIN	MAX
B50	9400	11800
B51	11800	14800

Forward Voltage
Unit: V@20mA

Bin code	MIN	MAX
V4	2.6	3.0
V5	3.0	3.4
V6	3.4	3.8

*Forward Voltage Measurement allowance is $\pm 0.1V$

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)
I	(0.260,0.290)	(0.270,0.308)	(0.288,0.296)	(0.278,0.280)
K	(0.270,0.308)	(0.280,0.325)	(0.298,0.313)	(0.288,0.296)
M	(0.280,0.325)	(0.293,0.343)	(0.311,0.329)	(0.298,0.313)