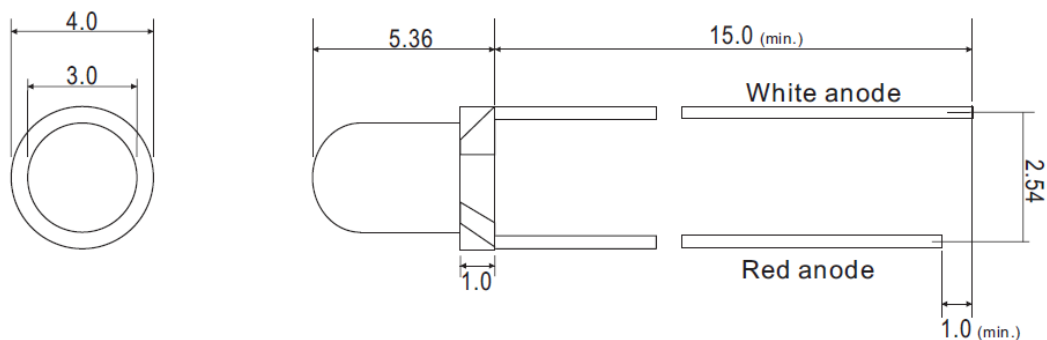


Duo color LED, round, 3mm, 2 pins, non-polarity

Dimensions:



ø3mm bi-color LED (Non-polarity)

Notes:

The tolerance is $\pm 0.25\text{mm}$.

Features:

- 1) Chip Material: AlGaInP & InGaN
- 2) Lens Color: Water Clear
- 3) Source Color: Red & White
- 4) Pb free
- 5) The product itself will remain within RoHS compliant version.

Datasheet

Item no. 1571552

V1_07272018_01_en

Absolute Maximum Ratings at Ta=25°C: (Red)

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	70	mW
Peak Forward Current (Duty 1/10 @ 1KHz)	I _{FP}	40-100	mA
Forward Current	I _F	20	mA
Reverse Voltage	V _R	5	V
Operating Temperature Range	T _{opr}	-25°C to +80°C	
Storage Temperature Range	T _{stg}	-40°C to +100°C	
Lead Soldering Temperature [2.0mm from body]	T _{sol}	Reflow Soldering: 260°C for 10 sec. Hand Soldering: 350°C for 3 sec.	

Electrical / Optical Characteristics at Ta=25°C: (Red)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	I _v	I _F =20mA	1350	1400	1450	mcd
Dominant Wavelength	λ _d	I _F =20mA	620	-	630	nm
Viewing Angle	2 θ _{1/2}	I _F =20mA	-	35	-	deg
Forward Voltage	V _F	I _F =20mA	1.9	2.0	2.2	V
Reverse Current	I _R	V _R =5V	-	-	<10	uA

Notes:

- 1) Tolerance of Luminous Intensity ±10%.
- 2) Tolerance of Forward Voltage ±0.1V.

Datasheet

Item no. 1571552

V1_07272018_01_en

Absolute Maximum Ratings at Ta=25°C: (White)

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	100	mW
Peak Forward Current (Duty 1/10 @ 1KHz)	IFP	120	mA
Forward Current	IF	30	mA
Electrostatic Discharge (HBM)	ESD	2000	V
Reverse Voltage	VR	5	V
Operating Temperature Range	Topr	-25°C to +80°C	
Storage Temperature Range	Tstg	-40°C to +100°C	
Lead Soldering Temperature [2.0mm from body]	Tsol	Reflow Soldering: 260°C for 10 sec. Hand Soldering: 350°C for 3 sec.	

Electrical / Optical Characteristics at Ta=25°C: (White)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	IF=20mA	1250	1300	1350	mcd
Correlated Color Temperature	CCT	IF=20mA	6000	6500	7000	K
Viewing Angle	2 θ1/2	IF=20mA	-	18	-	deg
Forward Voltage	VF	IF=20mA	3.0	3.3	3.6	V
Reverse Current	IR	VR=5V	-	-	<10	uA

Notes:

- 1) Tolerance of Luminous Intensity ±10%.
- 2) Tolerance of Forward Voltage ±0.1V.

Datasheet

Item no. 1571552

V1_07272018_01_en

Reliability test items and conditions:

The reliability of products shall be satisfied with items listed below.

Confidence level: 97%

LTPD: 3%

No	Item	Test Conditions	Test Hours / Cycle	Sample Size	Failure Judgment Criteria	Ac/ Re
1	Solder Heat	TEMP: 260°C ± 5°C	10 SEC	76 PCS	$I_v \leq I_{vt} \cdot 0.5$ or $V_f \geq U$ or $V_f \leq L$	0/1
2	Temperature Cycle	H : +100°C 15min \downarrow 5 min L : -40°C 15min	300 CYCLES	76 PCS		0/1
3	Thermal Shock	H : +100°C 5min \downarrow 10 sec L : -40°C 5min	300 CYCLES	76 PCS		0/1
4	High Temperature Storage	TEMP: 100°C	1000 HRS	76 PCS		0/1
5	Low Temperature Storage	TEMP: -40°C	1000 HRS	76 PCS		0/1
6	DC Operating Life	TEMP: 25°C, $I_f=20mA$	1000 HRS	76 PCS		0/1
7	High Temperature / High Humidity	85°C / 85% RH	1000 HRS	76 PCS		0/1

Notes:

I_{vt} : To test I_v value of the chip before the reliability test

I_v : The test value of the chip that has completed the reliability test

U: Upper Specification Limit

L: Lower Specification Limit