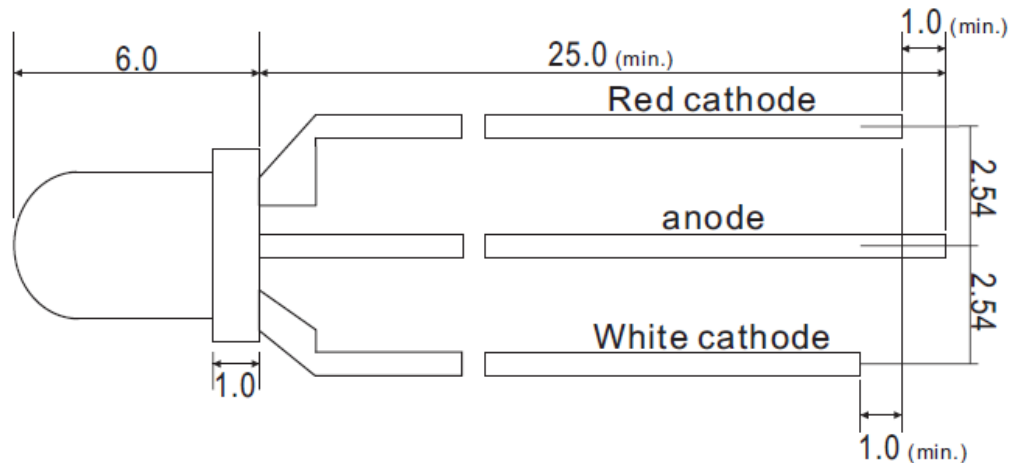
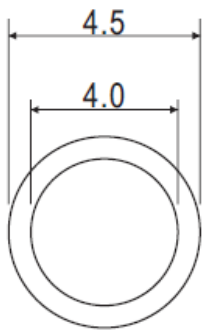


Duo color LED, round, 4mm, 3 pins, common anode



Notes:

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

Chip Material:	AlGaInP & InGaN
Lens Color:	Water Clear
Source Color:	Red & White

Pb free

The product itself will remain within RoHS compliant version.

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Absolute Maximum Ratings at $T_a=25^{\circ}\text{C}$: (Red)

Parameter	Symbol	Maximum	Unit
Power Dissipation	P_d	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 $+80^{\circ}\text{C}$	
Storage Temperature Range	T_{stg}	-40°C to $+100^{\circ}\text{C}$	
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 $T_a=25^{\circ}\text{C}$: (Red)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	I_v	$I_F=20\text{mA}$	700	790	820	mcd
Dominant Wavelength	λ_d	$I_F=20\text{mA}$	620	-	630	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	-	68	-	deg
Forward Voltage	V_F	$I_F=20\text{mA}$	1.9	2.0	2.2	V
Reverse Current	I_R	$V_R=5\text{V}$	-	-	<10	μA

Notes:

- 1) Tolerance of Luminous Intensity $\pm 10\%$.
- 2) Tolerance of Forward Voltage $\pm 0.1\text{V}$.

Datasheet

Item no. 1567732

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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]	Tsdl	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	2700	2750	3100	mcd
Correlated Color Temperature	CCT	IF=20mA	6000	6500	7000	K
Viewing Angle	2 θ1/2	IF=20mA	-	71	-	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

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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	$I_V \leq I_{Vt} * 0.5$ or $V_f \geq U$ or $V_f \leq L$	0/1
2	Temperature Cycle	H : +100°C 15min ↓ 5 min L : -40°C 15min	300 CYCLES	76 PCS		0/1
3	Thermal Shock	H : +100°C 5min ↓ 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