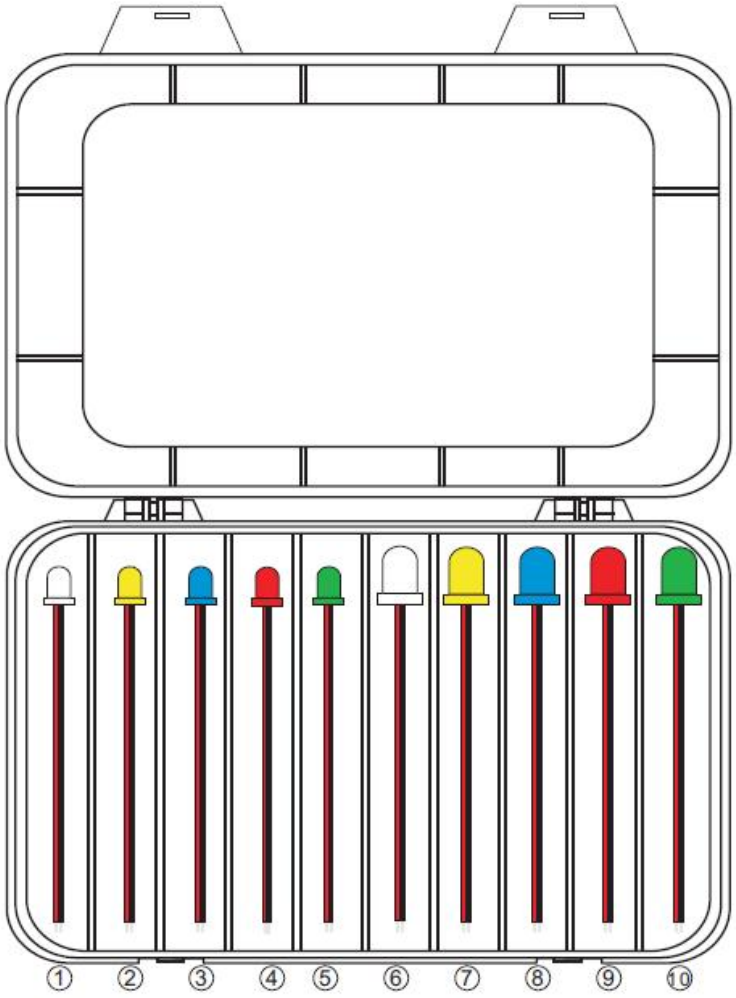
Datasheet

Item no. 1662321

V1_11022018_01_en

Round LED with wire, 10 Assortment, 100 pcs/ set



Set Contents:

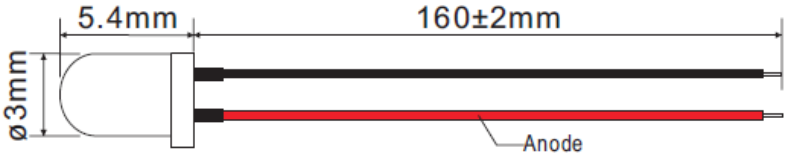
Section	LED size	Light Source Color	Luminous Intensity (mcd)	Specification
1	ø3mm	white	4000~8000	page 2
2	ø3mm	yellow	200~400	page 3
3	ø3mm	Blue	300~600	page 4
4	ø3mm	Red	100~300	page 5
5	ø3mm	Green	1000~2500	page 6
6	ø5mm	white	10000~15000	page 7
7	ø5mm	yellow	300~600	page 8
8	ø5mm	blue	300~600	page 9
9	ø5mm	Red	300~600	page 10
10	ø5mm	Green	2000~5000	page 11

Datasheet

Item no. 1662321

ø3mm (White)

Chip Material: InGaN
Lens Color: Water Clear
Source Color: White



Absolute Maximum Ratings at Ta=25°C:

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	110	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	100	mA
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	Topr	-25°C to 80°C	
Storage TemperatureRange	Tstg	-40°C to 100°C	

Electrical/Optical Characteristics at Ta=25°C:

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	I_F = 20mA	4000	8000	—	mcd
Chromaticity Coordinates	X	I_F = 20mA	—	0.31	—	—
Chromaticity Coordinates	Y	I_F = 20mA	—	0.33	—	—
Correlated Color Temperature	CCT	I_F = 20mA	5000	—	7000	K
Forward Voltage	V_F	I_F = 20mA	2.8	—	3.4	V
Viewing Angle	$2^{\theta}1/2$	I_F = 20mA	—	30	—	deg.
Reverse Current	I_R	V_R=5V	—	—	10	uA

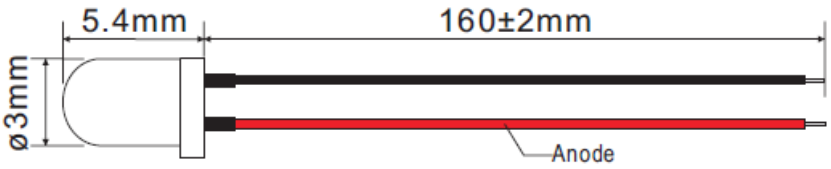
*Tolerance of Luminous Intensity ±10%
*Tolerance of Forward Voltage ±0.1V

Datasheet

Item no. 1662321

ø3mm (Yellow)

Chip Material: AlInGaP
Lens Color: Yellow Diffused
Source Color: Yellow



Absolute Maximum Ratings at Ta=25°C:

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	70	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	100	mA
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	Topr	-25°C to 80°C	
Storage TemperatureRange	Tstg	-40°C to 100°C	

Electrical/Optical Characteristics at Ta=25°C:

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	I_F= 20mA	200	400	—	mcd
Dominant Wavelength	λd	I_F= 20mA	585	—	595	nm
Viewing Angle	$2^{\theta}1/2$	I_F= 20mA	—	35	—	deg.
Forward Voltage	V_F	I_F= 20mA	1.8	2.1	2.4	V
Reverse Current	I_R	V_R=5V	—	—	50	uA

*Tolerance of Luminous Intensity ±10%
*Tolerance of Forward Voltage ±0.1V

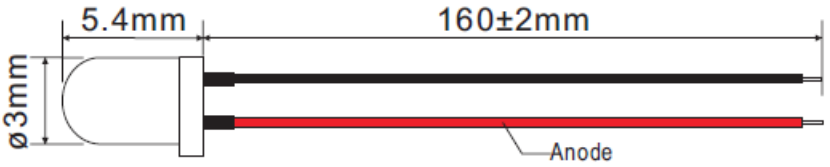
Datasheet

Item no. 1662321

V1_11022018_01_en

ø3mm (Blue)

Chip Material: InGaN
Lens Color: Blue Diffused
Source Color: Blue



Absolute Maximum Ratings at Ta=25°C:

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	100	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	120	mA
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	Topr	-25°C to 80°C	
Storage TemperatureRange	Tstg	-40°C to 100°C	

Electrical/Optical Characteristics at Ta=25°C:

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	I_F= 20mA	300	600	—	mcd
Dominant Wavelength	λd	I_F= 20mA	460	—	475	nm
Viewing Angle	$2^{\theta}1/2$	I_F= 20mA	—	35	—	deg.
Forward Voltage	V_F	I_F= 20mA	2.8	3.2	3.6	V
Reverse Current	I_R	V_R=5V	—	—	10	uA

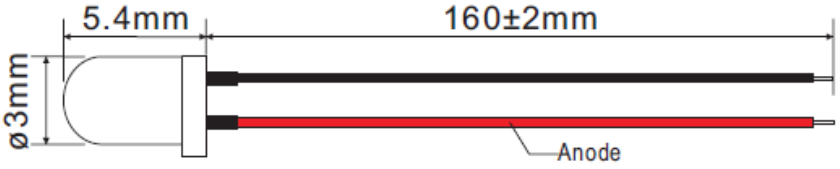
*Tolerance of Luminous Intensity ±10%
*Tolerance of Forward Voltage ±0.1V

Datasheet

Item no. 1662321

ø3mm (Red)

Chip Material: AlInGaP
Lens Color: Red Diffused
Source Color: Red



Absolute Maximum Ratings at Ta=25°C:

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	70	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	80	mA
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	Topr	-25°C to 80°C	
Storage TemperatureRange	Tstg	-40°C to 100°C	

Electrical/Optical Characteristics at Ta=25°C:

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	I_F= 20mA	100	300	—	mcd
Dominant Wavelength	λd	I_F= 20mA	620	—	630	nm
Viewing Angle	$2^{\theta}1/2$	I_F= 20mA	—	35	—	deg.
Forward Voltage	V_F	I_F= 20mA	1.8	2.1	2.4	V
Reverse Current	I_R	V_R=5V	—	—	50	uA

*Tolerance of Luminous Intensity ±10%
*Tolerance of Forward Voltage ±0.1V

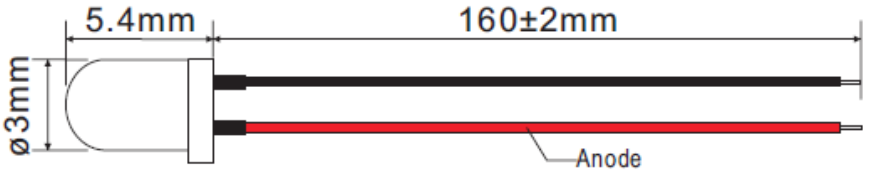
Datasheet

Item no. 1662321

V1_11022018_01_en

ø3mm (Green)

Chip Material: InGaN
Lens Color: Green Diffused
Source Color: True Green



Absolute Maximum Ratings at Ta=25°C:

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	100	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	120	mA
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	Topr	-25°C to 80°C	
Storage TemperatureRange	Tstg	-40°C to 100°C	

Electrical/Optical Characteristics at Ta=25°C:

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	I_F = 20mA	1000	2500	—	mcd
Dominant Wavelength	λd	I_F = 20mA	515	—	530	nm
Viewing Angle	$2^{\theta}1/2$	I_F = 20mA	—	35	—	deg.
Forward Voltage	V_F	I_F = 20mA	2.7	—	3.4	V
Reverse Current	I_R	V_R=5V	—	—	10	uA

*Tolerance of Luminous Intensity ±10%
*Tolerance of Forward Voltage ±0.1V

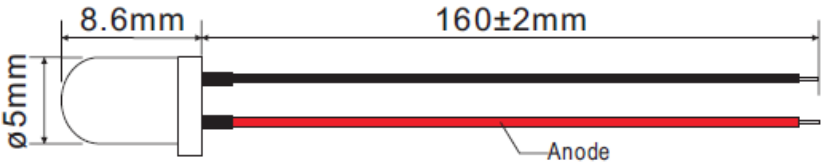
Datasheet

Item no. 1662321

V1_11022018_01_en

ø5mm (White)

Chip Material: InGaN
Lens Color: Water Clear
Source Color: White



Absolute Maximum Ratings at Ta=25°C:

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	110	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	100	mA
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	Topr	-25°C to 80°C	
Storage TemperatureRange	Tstg	-40°C to 100°C	

Electrical/Optical Characteristics at Ta=25°C:

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	I_F=20mA	10000	15000	—	mcd
Chromaticity Coordinates	X	I_F=20mA	—	0.31	—	—
Chromaticity Coordinates	Y	I_F=20mA	—	0.33	—	—
Correlated Color Temperature	CCT	I_F=20mA	5000	—	7000	K
Forward Voltage	V_F	I_F=20mA	2.8	—	3.4	V
Viewing Angle	$2^{\theta}1/2$	I_F=20mA	—	25	—	deg.
Reverse Current	I_R	V_R=5V	—	—	10	uA

*Tolerance of Luminous Intensity ±10%
*Tolerance of Forward Voltage ±0.1V

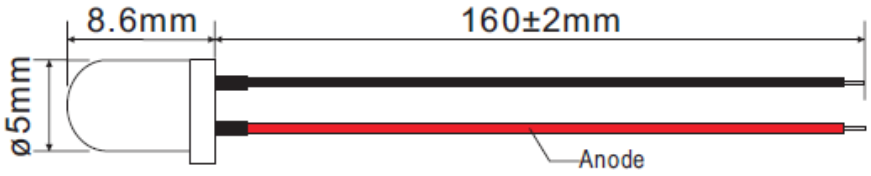
Datasheet

Item no. 1662321

V1_11022018_01_en

ø5mm (Yellow)

Chip Material: AlInGaP
Lens Color: Yellow Diffused
Source Color: Yellow



Absolute Maximum Ratings at Ta=25°C:

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	70	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	80	mA
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	Topr	-25°C to 80°C	
Storage TemperatureRange	Tstg	-40°C to 100°C	

Electrical/Optical Characteristics at Ta=25°C:

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	I_F = 20mA	300	600	—	mcd
Dominant Wavelength	λd	I_F = 20mA	585	—	595	nm
Viewing Angle	$2^{\theta}1/2$	I_F = 20mA	—	30	—	deg.
Forward Voltage	V_F	I_F = 20mA	1.8	2.1	2.4	V
Reverse Current	I_R	V_R=5V	—	—	50	uA

*Tolerance of Luminous Intensity ±10%
*Tolerance of Forward Voltage ±0.1V

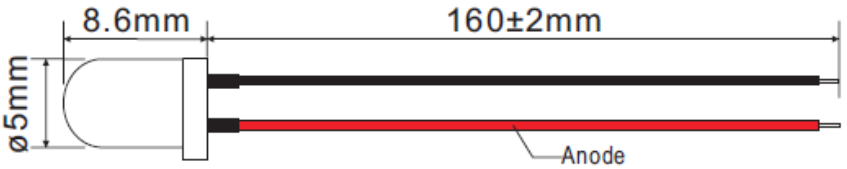
Datasheet

Item no. 1662321

V1_11022018_01_en

ø5mm (Blue)

Chip Material: InGaN
Lens Color: Blue Diffused
Source Color: Blue



Absolute Maximum Ratings at Ta=25°C:

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	100	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	120	mA
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	Topr	-25°C to 80°C	
Storage TemperatureRange	Tstg	-40°C to 100°C	

Electrical/Optical Characteristics at Ta=25°C:

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	I_F= 20mA	300	600	—	mcd
Dominant Wavelength	λd	I_F= 20mA	460	—	475	nm
Viewing Angle	$2^{\theta}1/2$	I_F= 20mA	—	30	—	deg.
Forward Voltage	V_F	I_F= 20mA	2.8	—	3.6	V
Reverse Current	I_R	V_R=5V	—	—	10	uA

*Tolerance of Luminous Intensity ±10%
*Tolerance of Forward Voltage ±0.1V

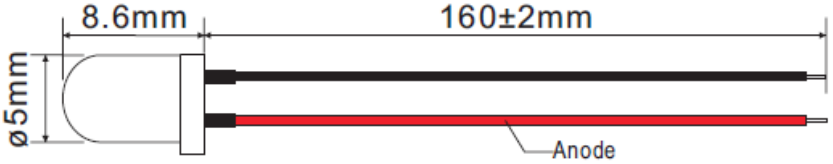
Datasheet

Item no. 1662321

V1_11022018_01_en

ø5mm (Red)

Chip Material: AlInGaP
Lens Color: Red Diffused
Source Color: Red



Absolute Maximum Ratings at Ta=25°C:

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	70	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	80	mA
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	Topr	-25°C to 80°C	
Storage TemperatureRange	Tstg	-40°C to 100°C	

Electrical/Optical Characteristics at Ta=25°C:

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	I_F = 20mA	300	600	—	mcd
Dominant Wavelength	λd	I_F = 20mA	620	—	635	nm
Viewing Angle	$2^{\theta}1/2$	I_F = 20mA	—	30	—	deg.
Forward Voltage	V_F	I_F = 20mA	1.8	2.1	2.4	V
Reverse Current	I_R	V_R=5V	—	—	50	uA

*Tolerance of Luminous Intensity ±10%
*Tolerance of Forward Voltage ±0.1V

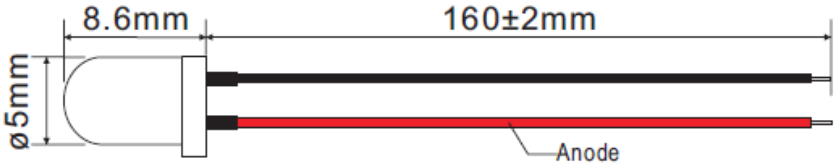
Datasheet

Item no. 1662321

V1_11022018_01_en

ø5mm (Green)

Chip Material: InGaN
Lens Color: Green Diffused
Source Color: True Green



Absolute Maximum Ratings at Ta=25°C:

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	110	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	100	mA
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	Topr	-25°C to 80°C	
Storage TemperatureRange	Tstg	-40°C to 100°C	

Electrical/Optical Characteristics at Ta=25°C:

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	I_F=20mA	2000	5000	—	mcd
Dominant Wavelength	λd	I_F=20mA	515	—	530	nm
Viewing Angle	$2^{\theta}1/2$	I_F=20mA	—	30	—	deg.
Forward Voltage	V_F	I_F=20mA	2.6	—	3.4	V
Reverse Current	I_R	V_R=5V	—	—	10	uA

*Tolerance of Luminous Intensity ±10%
*Tolerance of Forward Voltage ±0.1V