

#### Standard LED (white)



Part Number: LT-0006

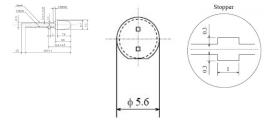
Diameter: 5mm Viewing Angle: 50° Housing Color: clear Emitting Color: white

X: 0,310 Y: 0,310

MCD min.: 7380 mcd MCD typ.: 8890 mcd MCD max.: 10400 mcd mA test.: 20 mcd mA typ.: 30 mA V typ.: 2,65 V V max.: 3,50 V Nichia LEDs are the most popular, high quality and reliable light emitting diodes to buy on the market since many years. Skilled eyes quickly recognise the solid leadframe, clear edges and unique dome.

These high performance LEDs for highest demands are convincing by features like long lifetime, true colors and processing quality. Perfected manufacturing sequences guarantie a steady top production standart up to the last detail that no second manufacturer provides that way.

Applications with Nichia LEDs maybe more cost intensive than applications with low budget LEDs of course but a lot more reliable and brilliant, too. If it is not a low cost project and your name stands for the quality you are making the best choice with these LEDs.





#### Superbright LED (blue)



Part Number: LT-0011

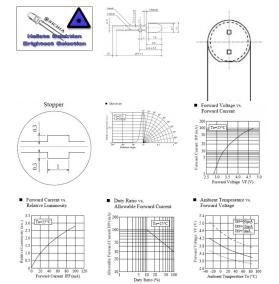
Diameter: 5mm Viewing Angle: 15° Housing Color: clear Emitting Color: blue

X: 0,130 Y: 0,130

MCD min.: 4120 mcd MCD typ.: 4800 mcd MCD max.: 5760 mcd mA test.: 20 mcd mA typ.: 30 mA V typ.: 3,6 V V max.: 4,0 V Nichia LEDs are the most popular, high quality and reliable light emitting diodes to buy on the market since many years. Skilled eyes quickly recognise the solid leadframe, clear edges and unique dome.

These high performance LEDs for highest demands are convincing by features like long lifetime, true colors and processing quality. Perfected manufacturing sequences guarantie a steady top production standart up to the last detail that no second manufacturer provides that way.

Applications with Nichia LEDs maybe more cost intensive than applications with low budget LEDs of course but a lot more reliable and brilliant, too. If it is not a low cost project and your name stands for the quality you are making the best choice with these LEDs.





#### Standard LED (blue)



Part Number: LT-0013

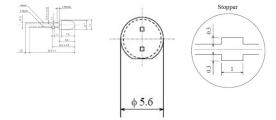
Diameter: 5mm Viewing Angle: 45° Housing Color: clear Emitting Color: blue

X: 0,130 Y: 0,130

MCD min.: 960 mcd MCD typ.: 1160 mcd MCD max.: 1380 mcd mA test.: 20 mcd mA typ.: 30 mA V typ.: 3,6 V V max.: 4,0 V Nichia LEDs are the most popular, high quality and reliable light emitting diodes to buy on the market since many years. Skilled eyes quickly recognise the solid leadframe, clear edges and unique dome.

These high performance LEDs for highest demands are convincing by features like long lifetime, true colors and processing quality. Perfected manufacturing sequences guarantie a steady top production standart up to the last detail that no second manufacturer provides that way.

Applications with Nichia LEDs maybe more cost intensive than applications with low budget LEDs of course but a lot more reliable and brilliant, too. If it is not a low cost project and your name stands for the quality you are making the best choice with these LEDs.





#### **Ultrabright LED (green)**



Part Number: LT-0017

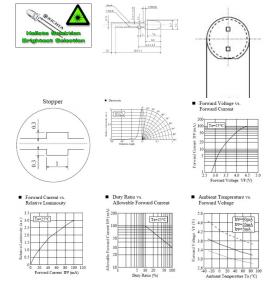
Diameter: 5mm Viewing Angle: 15° Housing Color: clear Emitting Color: green

X: 0,170 Y: 0,170

MCD min.: 13800 mcd MCD typ.: 16000 mcd MCD max.: 19500 mcd mA test.: 20 mcd mA typ.: 30 mA V typ.: 3,5 V V max.: 4,0 V Nichia LEDs are the most popular, high quality and reliable light emitting diodes to buy on the market since many years. Skilled eyes quickly recognise the solid leadframe, clear edges and unique dome.

These high performance LEDs for highest demands are convincing by features like long lifetime, true colors and processing quality. Perfected manufacturing sequences guarantie a steady top production standart up to the last detail that no second manufacturer provides that way.

Applications with Nichia LEDs maybe more cost intensive than applications with low budget LEDs of course but a lot more reliable and brilliant, too. If it is not a low cost project and your name stands for the quality you are making the best choice with these LEDs.





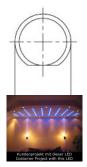
## **Ultrabright LED (blue)**



Part Number: LT-0025

Diameter: 5mm
Viewing Angle: 20°
Housing Color: clear
Emitting Color: blue
Nanometer: 470
MCD min.: 5800 mcd
MCD typ.: 7000 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 2,8 V
V max.: 3,4 V

Extraordinary branded LED of highest quality. Unbeatable in brightness and optimal for indoor and outdoor use with best price-performance ratio.









## **Ultrabright LED (yellow)**



Part Number: LT-0027 Diameter: 5mm Viewing Angle: 13° Housing Color: clear Emitting Color: yellow Nanometer: 588 MCD min.: 8000 mcd MCD typ.: 10000 mcd mA test.: 20 mcd mA typ.: 20 mA V typ.: 1,8 V Extraordinary branded LED of highest quality. Unbeatable in brightness and optimal for indoor and outdoor use with best price-performance ratio.



V max.: 2,4 V







## **Special Effect LED (pink)**



Part Number: LT-0031 Diameter: 5mm

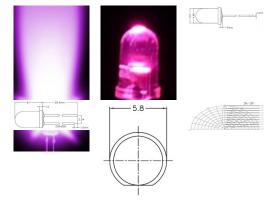
Viewing Angle: 25° Housing Color: clear Emitting Color: pink

X: 0,340 Y: 0,340

MCD typ.: 3000 mcd MCD max.: 4000 mcd mA typ.: 30 mA

V typ.: 2,8 V V max.: 3,4 V This new superbright pink 5mm LED uses a blue 470nm Chip which is coated with new red phosphor of 630nm.

The subsequent mixed color is much more brilliant than it was illuminated from former types





#### **Ultrabright LED (white)**



Part Number: LT-0033

Diameter: 5mm Viewing Angle: 15° Housing Color: clear Emitting Color: white

X: 0.30 Y: 0.30

MCD typ.: 16500 mcd MCD max.: 22000 mcd Lumen typ.: 2,9 mcd Lumen max.: 3,3 mcd mA test.: 20 mcd mA typ.: 30 mA mA max.: 100 mA V typ.: 3,2 V

V max.: 3,8 V

5.0±0.1 5.8±0.1 5.8±0.1 1510.5 25.4±0.10

-0.5±0.1

Bestseller 2007 - over 1 Million pcs. sold!

This 5mm ultrabright LED proofs that we can offer real bargains. Customers favourite project LED 2007 is now offered in top rank U (even in large quantities for industrial use).

The LED works with a GaN chip of typ. 15.000 - 18.000mcd (measured and proofed). The selection is very good and even useable for LED stripe or cluster applications. Try it!



# Classic LED (green)



Part Number: LT-0054
Diameter: 5mm
Viewing Angle: 60°
Housing Color: diffused
Emitting Color: green
Nanometer: 568
MCD max.: 30 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 2,2 V
V max.: 2,5 V

- Excellent quality product
- Long lifetime
- Very good quality
- Unbeatable price-performance ratio







# Classic LED (red)



Part Number: LT-0055
Diameter: 5mm
Viewing Angle: 60°
Housing Color: diffused
Emitting Color: red
Nanometer: 660
MCD max.: 35 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 2,0 V

- Excellent quality product
- Long lifetime
- Very good quality
- Unbeatable price-performance ratio



V max.: 2,5 V



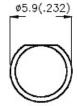


# Classic LED (yellow)



Part Number: LT-0056
Diameter: 5mm
Viewing Angle: 60°
Housing Color: diffused
Emitting Color: yellow
Nanometer: 588
MCD max.: 30 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 2,1 V
V max.: 2,5 V

- Excellent quality product
- Long lifetime
- Very good quality
- Unbeatable price-performance ratio







## **Ultrabright LED (red)**

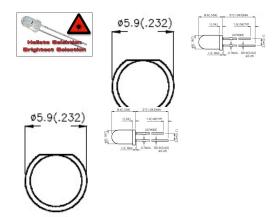


Part Number: LT-0066

Diameter: 5mm
Viewing Angle: 20°
Housing Color: clear
Emitting Color: red
Nanometer: 635
MCD typ.: 10000 mcd

MCD max.: 12000 mcd mA test.: 20 mcd mA typ.: 20 mA V typ.: 2,0 V V max.: 2,5 V

- Brightest selections
- Long lifetime
- Excellent quality
- Very good price-performance ratio





## Standard LED (red)

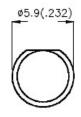


Part Number: LT-0067 Diameter: 5mm

Viewing Angle: 20°
Housing Color: clear
Emitting Color: red
Nanometer: 640
MCD typ.: 4500 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 1,8 V
V max.: 2,5 V

- Brightest selections
- Long lifetime
- Excellent quality
- Very good price-performance ratio









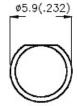
# **Standard LED (yellow)**



Part Number: LT-0068

Diameter: 5mm
Viewing Angle: 20°
Housing Color: clear
Emitting Color: yellow
Nanometer: 588
MCD typ.: 1500 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 2,0 V
V max.: 2,5 V

- Brightest selections
- Long lifetime
- Excellent quality
- Very good price-performance ratio







## **Ultrabright LED (white)**



Part Number: LT-0072

Diameter: 5mm
Viewing Angle: 15°
Housing Color: clear
Emitting Color: white
MCD min.: 12000 mcd
MCD typ.: 15000 mcd
Kelvin typ.: 6500 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 2,8 V
V max.: 3,4 V

- Brightest selections
- Long lifetime
- Excellent quality
- Very good price-performance ratio









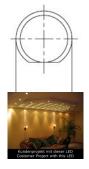
## **Ultrabright LED (green)**



Part Number: LT-0282

Diameter: 5mm
Viewing Angle: 15°
Housing Color: clear
Emitting Color: green
Nanometer: 525
MCD typ.: 16500 mcd
MCD max.: 22000 mcd
mA test.: 20 mcd
mA typ.: 20 mA
mA max.: 30 mA
V typ.: 3,3 V

Extraordinary branded LED of highest quality. Unbeatable in brightness and optimal for indoor and outdoor use with best price-performance ratio.



V max.: 4,0 V V sperr.: 5,0 V







## Duo LED (Superbright) (red / green)



Part Number: LT-0283

Diameter: 5mm
Viewing Angle: 24°
Housing Color: clear
Emitting Color: red / green

mA test.: 20 mcd mA typ.: 30 mA

3pin 5mm Double LED with common cathode with two main colors and one mix color.

Nanometer: R=635 / G=568
MCD typ.: R=1600 / G=200
V typ.: R=1,95 / G=2,2
V max.: R=2,5 / G=2,5

- Long lifetime











# Duo LED (red / green)



Part Number: LT-0284

Diameter: 5mm
Viewing Angle: 24°
Housing Color: clear
Emitting Color: red / green

mA test.: 20 mcd mA typ.: 30 mA

3pin 5mm Double LED with common cathode with two main colors and one mix color.

Nanometer: R=635 / G=568
 MCD typ.: R=150 / G=150
 V typ.: R=2,0 / G=2,2

- V max.: R=2,5 / G=2,5

- Long lifetime











# Duo LED (red / yellow)



Part Number: LT-0285

Diameter: 5mm Viewing Angle: 24° Housing Color: clear

Emitting Color: red / yellow

mA test.: 20 mcd mA typ.: 30 mA

3pin 5mm Double LED with common cathode with two main colors and one mix color.

Nanometer: R=635 / Y=588
MCD typ.: R=150 / Y=60
V typ.: R=2,0 / Y=2,1
V max.: R=2,5 / Y=2,5

- Long lifetime











# Duo LED (green / yellow)



Part Number: LT-0286

Diameter: 5mm Viewing Angle: 24° Housing Color: clear

Emitting Color: green / yellow

mA test.: 20 mcd mA typ.: 30 mA

3pin 5mm Double LED with common cathode with two main colors and one mix color.

Nanometer: G=568 / Y=588
MCD typ.: G=150 / Y=60
V typ.: G=2,2 / Y=2,1
V max.: G=2,5 / Y=2,5

- Long lifetime











## Blink LED (red)

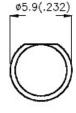


Part Number: LT-0298
Diameter: 5mm
Viewing Angle: 60°
Housing Color: diffused
Emitting Color: red
Nanometer: 625
MCD typ.: 40 mcd
MCD max.: 50 mcd
mA typ.: 22 mA
V typ.: 3,5 V
V max.: 5,0 V

Light emitting diodes with integrated microcircuits are currently most wanted. Ideal for modelling or industry use.

This blinking LED has best benchmark data to be supplied to every kind of use. The microcircuit has been integrated into the epoxy already.

Frequency: 1-2Hz







## Blink LED (red)

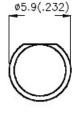


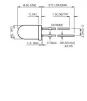
Part Number: LT-0299
Diameter: 5mm
Viewing Angle: 60°
Housing Color: diffused
Emitting Color: red
Nanometer: 640
MCD typ.: 200 mcd
MCD max.: 220 mcd
mA typ.: 22 mA
V typ.: 3,5 V
V max.: 5,0 V

Light emitting diodes with integrated microcircuits are currently most wanted. Ideal for modelling or industry use.

This blinking LED has best benchmark data to be supplied to every kind of use. The microcircuit has been integrated into the epoxy already.

Frequency: 1-2Hz







## **Blink LED (yellow)**

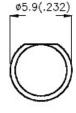


Part Number: LT-0300
Diameter: 5mm
Viewing Angle: 60°
Housing Color: diffused
Emitting Color: yellow
Nanometer: 588
MCD typ.: 200 mcd
MCD max.: 220 mcd
mA typ.: 22 mA
V typ.: 3,5 V

Light emitting diodes with integrated microcircuits are currently most wanted. Ideal for modelling or industry use.

This blinking LED has best benchmark data to be supplied to every kind of use. The microcircuit has been integrated into the epoxy already.

Frequency: 1-2Hz



V max.: 5,0 V





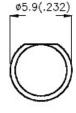
## Blink LED (green)



Part Number: LT-0301 Diameter: 5mm Viewing Angle: 60° Housing Color: diffused Emitting Color: green Nanometer: 568 MCD typ.: 20 mcd MCD max.: 30 mcd mA typ.: 22 mA V typ.: 3,5 V V max.: 5,0 V Light emitting diodes with integrated microcircuits are currently most wanted. Ideal for modelling or industry use.

This blinking LED has best benchmark data to be supplied to every kind of use. The microcircuit has been integrated into the epoxy already.

Frequency: 1-2Hz







## Blink LED (blue)



Part Number: LT-0302 Diameter: 5mm Viewing Angle: 60° Housing Color: diffused Emitting Color: blue Nanometer: 468 MCD typ.: 280 mcd MCD max.: 700 mcd mA typ.: 15 mA V typ.: 3,5 V V max.: 5,0 V Light emitting diodes with integrated microcircuits are currently most wanted. Ideal for modelling or industry use.

This blinking LED has best benchmark data to be supplied to every kind of use. The microcircuit has been integrated into the epoxy already.

Frequency: 1.5-3Hz







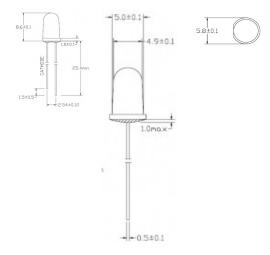
# **Superbright LED (blue)**



Part Number: LT-0323

Diameter: 5mm
Viewing Angle: 11°
Housing Color: clear
Emitting Color: blue
Nanometer: 470
MCD typ.: 8000 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 2,8 V
V max.: 3,4 V

- Brightest selections
- Long lifetime
- Excellent quality
- Very good price-performance ratio





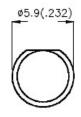
## **Ultrabright LED (red)**



Part Number: LT-0324
Diameter: 5mm
Viewing Angle: 11°
Housing Color: clear
Emitting Color: red
Nanometer: 620
MCD min.: 5000 mcd
MCD typ.: 6000 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 1,8 V
V max.: 2,4 V

- Brightest selections
- Long lifetime
- Excellent quality
- Very good price-performance ratio









## Superbright LED (golden white)



Part Number: LT-0327

Diameter: 5mm Viewing Angle: 30° Housing Color: clear

Emitting Color: golden white

MCD typ.: 2800 mcd MCD max.: 3500 mcd mA test.: 20 mcd mA typ.: 30 mA V typ.: 3,2 V The name YolDal is currently resounded throughout every land. Their new LEDs are a harmonical alternative to common (cold) white LEDs. Qualified for modelling and ambience of living space. If you have any questions regarding alternative indoor and outdoor lighting please let us know.









#### **Ultrabright LED (sunny white)**



Part Number: LT-0328 Diameter: 5mm Viewing Angle: 20°

Housing Color: clear

Emitting Color: sunny white

MCD typ.: 9200 mcd MCD max.: 11000 mcd mA test.: 20 mcd mA typ.: 30 mA

V typ.: 3,2 V

The name YolDal is currently resounded throughout every land. Their new LEDs are a harmonical alternative to common (cold) white LEDs. Qualified for modelling and ambience of living space. If you have any questions regarding alternative indoor and outdoor lighting please let us know.







#### **Superbright LED (sunny white)**



Part Number: LT-0329

Diameter: 5mm Viewing Angle: 40° Housing Color: clear

Emitting Color: sunny white

MCD typ.: 2800 mcd MCD max.: 3600 mcd mA test.: 20 mcd mA typ.: 30 mA V typ.: 3,2 V The name YolDal is currently resounded throughout every land. Their new LEDs are a harmonical alternative to common (cold) white LEDs. Qualified for modelling and ambience of living space. If you have any questions regarding alternative indoor and outdoor lighting please let us know.







# **Ultrabright LED (warm white)**



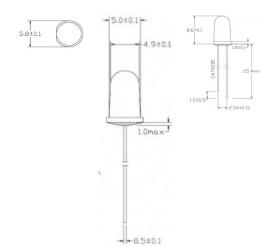
Part Number: LT-0333

Diameter: 5mm Viewing Angle: 15° Housing Color: clear

Emitting Color: warm white MCD min.: 12000 mcd MCD typ.: 15000 mcd MCD max.: 18000 mcd Kelvin typ.: 3000 mcd mA test.: 20 mcd mA typ.: 20 mA V typ.: 2,8 V

V max.: 3,4 V

- Brightest selections
- Long lifetime
- Excellent quality
- Very good price-performance ratio





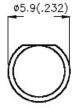
## **Standard LED (orange)**



Part Number: LT-0345

Diameter: 5mm
Viewing Angle: 20°
Housing Color: clear
Emitting Color: orange
Nanometer: 601
MCD typ.: 3500 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 2,0 V
V max.: 2,5 V

The new low cost LED with a very attractive price-performance ratio. Bottom price







# **Superbright LED (red)**



Part Number: LT-0360 Diameter: 5mm Viewing Angle: 20° Housing Color: clear Emitting Color: red Nanometer: 622 MCD typ.: 4000 mcd mA test.: 20 mcd mA typ.: 20 mA V typ.: 1,8 V

V max.: 2,4 V

- Brightest selections
- Long lifetime
- Excellent quality
- Very good price-performance ratio







# **IR LED (infrared)**



Part Number: LT-0428

Diameter: 5mm Viewing Angle: 20° Housing Color: clear Emitting Color: infrared

Nanometer: 880 MCD min.: 10 mcd MCD typ.: 30 mcd mA test.: 20 mcd mA typ.: 20 mA V typ.: 1,3 V V max.: 1,6 V The new infrared LED with 50mA (max). The capacistance is 90pF at f = 1 MHz.







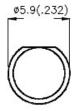
## **Superbright LED (red)**



Part Number: LT-0552

Diameter: 5mm
Viewing Angle: 20°
Housing Color: clear
Emitting Color: red
Nanometer: 621
MCD typ.: 5500 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 2,0 V
V max.: 2,5 V

The new low cost LED with a very attractive price-performance ratio. Bottom price now!







## **IR LED (infrared)**



Part Number: LT-0592

Diameter: 5mm Viewing Angle: 20° Housing Color: clear Emitting Color: infrared

Nanometer: 850 MCD min.: 10 mcd MCD typ.: 40 mcd mA test.: 20 mcd mA typ.: 20 mA V typ.: 1,4 V V max.: 1,6 V The new infrared LED with 50mA (max). The capacistance is 30pF at f = 1 MHz.







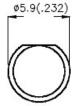
## UV LED (UV)



Part Number: LT-0670

Diameter: 5mm
Viewing Angle: 30°
Housing Color: clear
Emitting Color: UV
Nanometer: 400
MCD typ.: 700 mcd
mA test.: 25 mcd
mA typ.: 30 mA
V typ.: 3.5 V
V max.: 4.0 V
V sperr.: 5.0 V

- Brightest selections
- Long lifetime
- Excellent quality
- Very good price-performance ratio







## Superbright RGB LED (CC) (red / green / blue)



Part Number: LT-0672

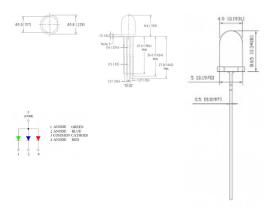
Diameter: 5mm Viewing Angle: 25°

Housing Color: transparent Emitting Color: red / green / blue

mA test.: 20 mcd mA typ.: 35 mA 5mm superbright RGB LED with common cathode (CC) and 6 times brighter than the standart types. 4pin design for easy controlling and individual colors.

Nanometer: R=626 / G=525 / B=470
 MCD typ.: R=3200 / G=4000 / B=2000
 MCD max.: R=4000 / G=2000 / B=4000

- V typ.: R=2,05 / G=3,6 / B=3,6





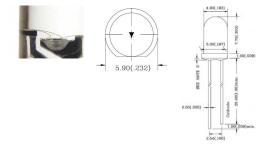
## Flashing LED (blue)



Part Number: LT-1022 Diameter: 5mm Viewing Angle: 20° Housing Color: clear Emitting Color: blue Nanometer: 470 MCD max.: 9000 mcd mA typ.: 20 mA V typ.: 3,3 V V max.: 4,0 V Extrem bright and widely visible flashing LED. Ideal for commercial use and other eyecather applications. Further advantage are long lifetime and industry standard quality!

This flashing LED has best benchmark data to be supplied to every kind of use. The microcircuit has been integrated into the epoxy already.

Frequency: 1-2Hz





## Flashing LED (green)

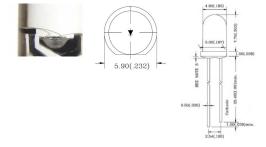


Part Number: LT-1023 Diameter: 5mm Viewing Angle: 20° Housing Color: clear Emitting Color: green Nanometer: 570 MCD max.: 15000 mcd

mA typ.: 20 mA V typ.: 3,3 V V max.: 4,0 V Extrem bright and widely visible flashing LED. Ideal for commercial use and other eyecather applications. Further advantage are long lifetime and industry standard quality!

This flashing LED has best benchmark data to be supplied to every kind of use. The microcircuit has been integrated into the epoxy already.

Frequency: 1-2Hz





## Flashing LED (yellow)

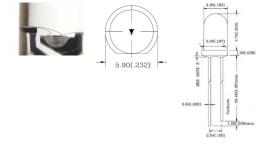


Part Number: LT-1025 Diameter: 5mm Viewing Angle: 20° Housing Color: clear Emitting Color: yellow Nanometer: 588

MCD max.: 10000 mcd mA typ.: 20 mA V typ.: 2,0 V V max.: 2,5 V Extrem bright and widely visible flashing LED. Ideal for commercial use and other eyecather applications. Further advantage are long lifetime and industry standard quality!

This flashing LED has best benchmark data to be supplied to every kind of use. The microcircuit has been integrated into the epoxy already.

Frequency: 1-2Hz



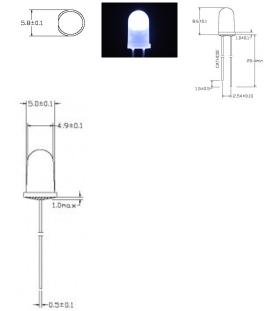


## Wide Beam LED (white)



Part Number: LT-1034
Diameter: 5mm
Viewing Angle: 70°
Housing Color: diffused
Emitting Color: white
MCD typ.: 2000 mcd
Kelvin typ.: 6500 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 2,8 V
V max.: 3,4 V

5mm wide beam LED with 70° viewing angle with and diffused dome. The LEDs of the wide beam series illuminate very homogeneous and are perfect for signal applications where visibility from all sides is neccessary or for surface illumination where smooth lighting without any spots is most important.



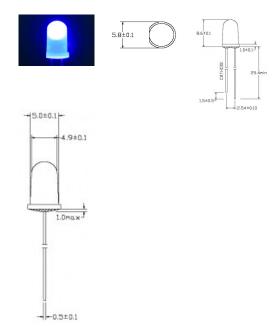


## Wide Beam LED (blue)



Part Number: LT-1035
Diameter: 5mm
Viewing Angle: 70°
Housing Color: diffused
Emitting Color: blue
Nanometer: 470
MCD typ.: 1000 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 2,8 V
V max.: 3,4 V

5mm wide beam LED with 70° viewing angle and diffused dome. The LEDs of the wide beam series illuminate very homogeneous and are perfect for signal applications where visibility from all sides is neccessary or for surface illumination where smooth lighting without any spots is most important.

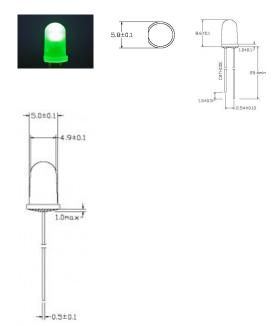




## Wide Beam LED (green)



Part Number: LT-1036 Diameter: 5mm Viewing Angle: 70° Housing Color: diffused Emitting Color: green Nanometer: 525 MCD typ.: 1500 mcd mA test.: 20 mcd mA typ.: 20 mA V typ.: 2,8 V V max.: 3,4 V 5mm wide beam LED with 70° viewing angle and diffused dome. The LEDs of the wide beam series illuminate very homogeneous and are perfect for signal applications where visibility from all sides is neccessary or for surface illumination where smooth lighting without any spots is most important.

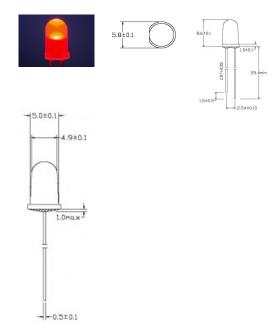




## Wide Beam LED (red)



Part Number: LT-1037 Diameter: 5mm Viewing Angle: 70° Housing Color: diffused Emitting Color: red Nanometer: 620 MCD typ.: 1000 mcd mA test.: 20 mcd mA typ.: 20 mA V typ.: 1,8 V V max.: 2,4 V 5mm wide beam LED with 70° viewing angle and diffused dome. The LEDs of the wide beam series illuminate very homogeneous and are perfect for signal applications where visibility from all sides is neccessary or for surface illumination where smooth lighting without any spots is most important.



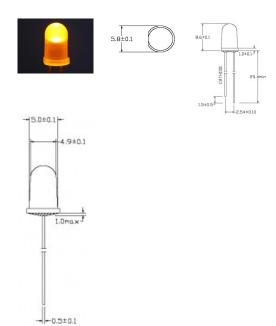


## Wide Beam LED (yellow)



Part Number: LT-1038
Diameter: 5mm
Viewing Angle: 70°
Housing Color: diffused
Emitting Color: yellow
Nanometer: 590
MCD typ.: 1000 mcd
mA test.: 20 mcd
mA typ.: 20 mA
V typ.: 1,8 V
V max.: 2,4 V

5mm wide beam LED with 70° viewing angle and diffused dome. The LEDs of the wide beam series illuminate very homogeneous and are perfect for signal applications where visibility from all sides is neccessary or for surface illumination where smooth lighting without any spots is most important.





# Duo LED (Superbright) with common Anode (red / yellow)



Part Number: LT-1065

Diameter: 5mm
Viewing Angle: 24°
Housing Color: clear
Emitting Color: red / yellow

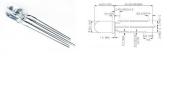
mA test.: 20 mcd mA typ.: 30 mA

3pin 5mm Double LED with common anode with two main colors and one mix color.

Nanometer: R=635 / G=590
MCD typ.: R=35 / G=12
V typ.: R=1,95 / G=2,2
V max.: R=2,5 / G=2,5

- Long lifetime

- Easy use because of 3pin design







## **Duo LED with common Anode (red / yellow)**



Part Number: LT-1092

Diameter: 5mm Viewing Angle: 24° Housing Color: clear

Emitting Color: red / yellow

mA test.: 20 mcd mA typ.: 30 mA

3pin 5mm Double LED with common anode with two main colors and one mix color.

Nanometer: R=625 / Y=588
MCD typ.: R=2.5 / Y=2
V typ.: R=2,0 / Y=2,1
V max.: R=2,5 / Y=2,5

- Long lifetime

- Easy use because of 3pin design











## IR LED (infrared)



Part Number: LT-1099

Diameter: 5mm Viewing Angle: 20° Housing Color: clear Emitting Color: infrared

Nanometer: 940 MCD typ.: 40 mcd mA typ.: 50 mA V typ.: 1,2 V V max.: 1,6 V The new infrared LED with 50mA (max). The capacistance is 30pF at f = 1 MHz.

Output: 30mW/sr







## Mini Constant Current Power Supply (10mA, up to 38V) with rectifier



Part Number: LT-1183 mA typ.: 10 mA V typ.: 38 V 2008 Edition with many innovations!

This new and unbelievable small constant current power supply for your LEDs works with the above mentioned output current. The forward voltage is secundary. This garanties a homogeneous brightness through the whole forward voltage range and a maximum lifetime to the connected LEDs.

The usage and operating range:

The usage is really very simple. You only have to check that the minimum input voltage is 3,8V higher than the common LED forward voltages and the maximum input voltage should not be more than 38V above the minimum input voltage. Please also have a look at the below mentioned examples.

#### What is new?

- Smaller housing for bigger range of applications
- With bridge rectifier to protect from wrong polarity
- Thermal protections: Self adjusting when too hot

#### Further Data:

- Dimensions: 16.0 x 7.5 x 3.0mm

- Min. voltage: 3V DC oder 2V AC

- Max. voltage: 38V DC oder 26V AC

- Max. power consumption: 500mW

- Operating temperature: -25°C up to +125°C

- Input: protection against wrong polarity
- Output: wrong polarity & amp; short circuit protected

- Contacts: Soldering pads

- Drop voltage: 3,8V

- Delivery: Completly mounted & amp; tested

#### How to connect:

- Input: marked with IN (equal polarity)
- Output: Marked with A/K. A=Anode (+), K=Cathode (-)

#### Example 1:

You are going to connect 2 LEDs with 3,2 forward voltage each (mostly mentioned as Vf in common datasheets). The input voltage can change from 10,2V (3,2 + 3,2 + 3,8) till 38V (10,2 + 38,0-8gt; 38V = Max. of power supply).

#### Example 2:

You are goint to connect one white LED (3,5V). The input voltage can change from 7.3V (3,5 + 3,8) till 38V (7,3 + 38,0 -> 38V = Max. of power supply).









## Mini Constant Current Power Supply (20mA, up to 38V) with rectifier



Part Number: LT-1184 mA typ.: 20 mA V typ.: 38 V 2008 Edition with many innovations!

This new and unbelievable small constant current power supply for your LEDs works with the above mentioned output current. The forward voltage is secundary. This garanties a homogeneous brightness through the whole forward voltage range and a maximum lifetime to the connected LEDs.

The usage and operating range:

The usage is really very simple. You only have to check that the minimum input voltage is 3,8V higher than the common LED forward voltages and the maximum input voltage should not be more than 27V above the minimum input voltage. Please also have a look at the below mentioned examples.

#### What is new?

- Smaller housing for bigger range of applications
- With bridge rectifier to protect from wrong polarity
- Thermal protections: Self adjusting when too hot

#### Further Data:

- Dimensions: 16.0 x 7.5 x 3.0mm

- Min. voltage: 3V DC oder 2V AC

- Max. voltage: 38V DC oder 26V AC

- Max. power consumption: 500mW

- Operating temperature: -25°C up to +125°C

- Input: protection against wrong polarity

- Output: wrong polarity & amp; short circuit protected

- Contacts: Soldering pads

- Drop voltage: 3,8V

- Delivery: Completly mounted & amp; tested

#### How to connect:

- Input: marked with IN (equal polarity)
- Output: Marked with A/K. A=Anode (+), K=Cathode (-)

#### Example 1:

You are going to connect 2 LEDs with 3,2 forward voltage each (mostly mentioned as Vf in common datasheets). The input voltage can change from 10,2V (3,2 + 3,2 + 3,8) till 37,2V (10,2 + 27,0).

#### Example 2:

You are goint to connect one white LED (3,5V). The input voltage can change from 7.3V (3,5 + 3,8) till 34,3V (7,3 + 27,0).









## Mini Constant Current Power Supply (30mA, up to 38V) with rectifier



Part Number: LT-1185 mA typ.: 30 mA V typ.: 38 V 2008 Edition with many innovations!

This new and unbelievable small constant current power supply for your LEDs works with the above mentioned output current. The forward voltage is secundary. This garanties a homogeneous brightness through the whole forward voltage range and a maximum lifetime to the connected LEDs.

The usage and operating range:

The usage is really very simple. You only have to check that the minimum input voltage is 3,8V higher than the common LED forward voltages and the maximum input voltage should not be more than 18V above the minimum input voltage. Please also have a look at the below mentioned examples.

#### What is new?

- Smaller housing for bigger range of applications
- With bridge rectifier to protect from wrong polarity
- Thermal protections: Self adjusting when too hot

#### Further Data:

- Dimensions: 16.0 x 7.5 x 3.0mm

- Min. voltage: 3V DC oder 2V AC

- Max. voltage: 38V DC oder 26V AC

- Max. power consumption: 500mW

- Operating temperature: -25°C up to +125°C

- Input: protection against wrong polarity

- Output: wrong polarity & amp; short circuit protected

- Contacts: Soldering pads

- Drop voltage: 3,8V

- Delivery: Completly mounted & amp; tested

#### How to connect:

- Input: marked with IN (equal polarity)
- Output: Marked with A/K. A=Anode (+), K=Cathode (-)

#### Example 1:

You are going to connect 2 LEDs with 3,2 forward voltage each (mostly mentioned as Vf in common datasheets). The input voltage can change from 10,2V (3,2 + 3,2 + 3,8) till 28,2V (10,2 + 18,0).

#### Example 2:

You are goint to connect one white LED (3,5V). The input voltage can change from 7.3V (3,5 + 3,8) till 25,3V (7,3 + 18,0).









## Mini Constant Current Power Supply (10mA, up to 37V)



Part Number: LT-1212 mA typ.: 10 mA V typ.: 37 V 2008 Edition with many innovations!

This new and unbelievable small constant current power supply for your LEDs works with the above mentioned output current. The forward voltage is secundary. This garanties a homogeneous brightness through the whole forward voltage range and a maximum lifetime to the connected LEDs.

The usage and operating range:

The usage is really very simple. You only have to check that the minimum input voltage is 2,5V higher than the common LED forward voltages and the maximum input voltage should not be more than 37V above the minimum input voltage. Please also have a look at the below mentioned examples.

What is new?

- Smaller housing for bigger range of applications
- Thermal protections: Self adjusting when too hot

Further Data:

- Dimensions: 16.0 x 5,5 x 2,5mm

Min. voltage: 1,5V DCMax. voltage: 37V DC

- Max. power consumption: 500mW

- Operating temperature: -25°C up to +125°C

- Output: wrong polarity & amp; short circuit protected

- Contacts: Soldering pads

- Drop voltage: 2,5V

- Delivery: Completly mounted & amp; tested

How to connect:

- Input: marked with + and (watch polarity)
- Output: Marked with A/K. A=Anode (+), K=Cathode (-)

#### Example 1:

You are going to connect 2 LEDs with 3,2 forward voltage each (mostly mentioned as Vf in common datasheets). The input voltage can change from 8,9V (3,2 + 3,2 + 2,5) till 37V (8,9 + 37,0-> 37V = Max. of power supply).

#### Example 2:

You are goint to connect one white LED (3,5V). The input voltage can change from 6.0V (3,5 + 2,5) till 37V (6,0 + 37,0 -> 37V = Max. of power supply).









## Mini Constant Current Power Supply (20mA, up to 37V)



Part Number: LT-1213 mA typ.: 20 mA V typ.: 37 V 2008 Edition with many innovations!

This new and unbelievable small constant current power supply for your LEDs works with the above mentioned output current. The forward voltage is secundary. This garanties a homogeneous brightness through the whole forward voltage range and a maximum lifetime to the connected LEDs.

The usage and operating range:

The usage is really very simple. You only have to check that the minimum input voltage is 2,5V higher than the common LED forward voltages and the maximum input voltage should not be more than 27V above the minimum input voltage. Please also have a look at the below mentioned examples.

What is new?

- Smaller housing for bigger range of applications
- Thermal protections: Self adjusting when too hot

Further Data:

- Dimensions:  $16.0 \times 5.5 \times 2.5 \text{mm}$ 

Min. voltage: 1,5V DCMax. voltage: 37V DC

- Max. power consumption: 500mW

- Operating temperature: -25°C up to +125°C

- Output: wrong polarity & amp; short circuit protected

- Contacts: Soldering pads

- Drop voltage: 2,5V

- Delivery: Completly mounted & amp; tested

How to connect:

- Input: marked with + and (watch polarity)
- Output: Marked with A/K. A=Anode (+), K=Cathode (-)

#### Example 1:

You are going to connect 2 LEDs with 3,2 forward voltage each (mostly mentioned as Vf in common datasheets). The input voltage can change from 8,9V (3,2 + 3,2 + 2,5) till 35,9V (8,9 + 27,0).

#### Example 2:

You are goint to connect one white LED (3,5V). The input voltage can change from 6.0V (3,5 + 2,5) till 33,0V (6,0 + 27,0).









## Mini Constant Current Power Supply (30mA, up to 37V)



Part Number: LT-1214 mA typ.: 30 mA V typ.: 37 V 2008 Edition with many innovations!

This new and unbelievable small constant current power supply for your LEDs works with the above mentioned output current. The forward voltage is secundary. This garanties a homogeneous brightness through the whole forward voltage range and a maximum lifetime to the connected LEDs.

The usage and operating range:

The usage is really very simple. You only have to check that the minimum input voltage is 2,5V higher than the common LED forward voltages and the maximum input voltage should not be more than 18V above the minimum input voltage. Please also have a look at the below mentioned examples.

What is new?

- Smaller housing for bigger range of applications
- Thermal protections: Self adjusting when too hot

Further Data:

- Dimensions: 16.0 x 5,5 x 2,5mm

Min. voltage: 1,5V DCMax. voltage: 37V DC

- Max. power consumption: 500mW

- Operating temperature: -25°C up to +125°C

- Output: wrong polarity & amp; short circuit protected

- Contacts: Soldering pads

- Drop voltage: 2,5V

- Delivery: Completly mounted & amp; tested

How to connect:

- Input: marked with + and (watch polarity)
- Output: Marked with A/K. A=Anode (+), K=Cathode (-)

#### Example 1:

You are going to connect 2 LEDs with 3,2 forward voltage each (mostly mentioned as Vf in common datasheets). The input voltage can change from 8,9V (3,2 + 3,2 + 2,5) till 26,9V (8,9 + 18,0).

#### Example 2

You are goint to connect one white LED (3,5V). The input voltage can change from 6.0V (3,5 + 2,5) till 24,0V (6,0 + 18,0).









## **Ultrabright LED (white)**



Part Number: LT-1403 Diameter: 5mm Viewing Angle: 15° Housing Color: clear Emitting Color: white

X: 0,310 Y: 0,310

MCD min.: 31000 mcd MCD max.: 44000 mcd mA test.: 20 mcd mA typ.: 30 mA V typ.: 3,2 V V max.: 3,5 V The top version with new DS chip!

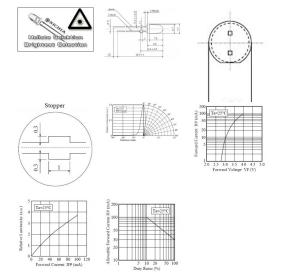
The NSPW-500DS is the follower of the BS version and comes with a multiple of brightness of the former modell. This is possible because of an advanced chip, new materials and the well known production quality of Nichia products.

Nichia LEDs are the most popular, high quality and reliable light emitting diodes to buy on the market since many years. Skilled eyes quickly recognise the solid leadframe, clear edges and unique dome.

These high performance LEDs for highest demands are convincing by features like long lifetime, true colors and processing quality. Perfected manufacturing sequences guarantie a steady top production standart up to the last detail that no second manufacturer provides that way.

Applications with Nichia LEDs maybe more cost intensive than applications with low budget LEDs of course but a lot more reliable and brilliant, too. If it is not a low cost project and your name stands for the quality you are making the best choice with these LEDs.

Regularly released lifetime tables and manifold selection possibilities proof that Nichia is no manufacturer who rounds up datasheet values or delivers bad selected products. With Nichia you pay it safe!





## **Ultrabright LED (blue)**



Part Number: LT-1404 Diameter: 5mm Viewing Angle: 15°

Housing Color: clear Emitting Color: blue

X: 0,130 Y: 0,130

MCD min.: 8240 mcd MCD max.: 11500 mcd mA test.: 20 mcd mA typ.: 30 mA V typ.: 3,2 V

V max.: 3,5 V

The top version with new AS chip!

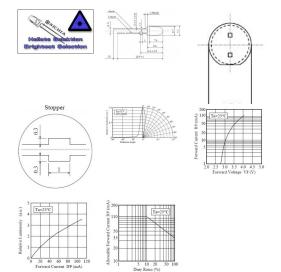
The NSPB-500AS is the follower of the S version and comes with a multiple of brightness of the former modell. This is possible because of an advanced chip, new materials and the well known production quality of Nichia products.

Nichia LEDs are the most popular, high quality and reliable light emitting diodes to buy on the market since many years. Skilled eyes quickly recognise the solid leadframe, clear edges and unique dome.

These high performance LEDs for highest demands are convincing by features like long lifetime, true colors and processing quality. Perfected manufacturing sequences guarantie a steady top production standart up to the last detail that no second manufacturer provides that way.

Applications with Nichia LEDs maybe more cost intensive than applications with low budget LEDs of course but a lot more reliable and brilliant, too. If it is not a low cost project and your name stands for the quality you are making the best choice with these LEDs.

Regularly released lifetime tables and manifold selection possibilities proof that Nichia is no manufacturer who rounds up datasheet values or delivers bad selected products. With Nichia you pay it safe!





## **Imprint**







LED-TECH.DE optoelectronics Showroom

Director: Stefan Lenz Am Schürmannshütt 38B D-47441 Moers

Phone: (+49) 2841 / 97 91 7-0 Fax: (+49) 2841 / 97 91 7-29

Further we want to point at pictures, graphics and descriptions as well as the pagelayout itself which are all subject to copyright. Every offence will be prosecuted.

All mentioned prices are to be understood as gross prices including the value added tax (TAV). All offers are subject to prior sales and without commitment. Delivery times are to be understood from date of receipt of order. Mistakes and changes in prices are always reserved.



Notizer	1			

