

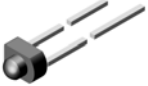







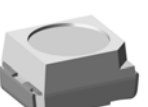


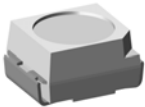
| DESCRIPTION | PART NUMBER | ANGLE $\pm\varphi$ [°] | COLOR | WAVELENGTH [nm] | I_v [mcd] | @ I_F [mA] | V_F [V] | @ I_F [mA] |
|---|---|------------------------------|---------------|--------------------|----------------|-----------------|---------------|-----------------|
| Ultra-Bright LEDs 5 mm T 1 3/4 Standard Package  | TLCR5100 | 9 | High-eff. Red | 622 | 4300-11000 | 50 | 2.1 (<2.7) | 50 |
| | TLCY5100 | 9 | Yellow | 581-597 | 3200-7500 | 50 | 2.1 (<2.7) | 50 |
| | TLCTG5100 | 9 | True green | 509-541 | 1800-5000 | 30 | 3.9 (<4.5) | 30 |
| | TLCB5100 | 9 | Blue | 458-476 | 575-1500 | 30 | 3.9 (<4.5) | 30 |
| | TLCR5200 | 15 | High-eff. Red | 622 | 1350-4000 | 50 | 2.1 (<2.7) | 50 |
| | TLCY5200 | 15 | Yellow | 585-597 | 1350-4000 | 50 | 2.1 (<2.7) | 50 |
| | TLCTG5200 | 15 | True green | 515-535 | 750-2000 | 30 | 3.9 (<4.5) | 30 |
| | TLCB5200 | 15 | Blue | 462-476 | 240-700 | 30 | 3.9 (<4.5) | 30 |
| | TLCR5800 | 4 | High-eff. Red | 622 | 7500-20000 | 50 | 2.1 (<2.7) | 50 |
| | TLCY5800 | 4 | Yellow | 581-597 | 5750-14000 | 50 | 2.1 (<2.7) | 50 |
| | TLCTG5800 | 4 | True green | 509-541 | 2400-7000 | 30 | 3.9 (<4.5) | 30 |
| | TLCB5800 | 4 | Blue | 458-476 | 750-2500 | 30 | 3.9 (<4.5) | 30 |
| | TELUX (TM) LEDs 8 mm x 7 mm w Lens Package  | TLWR7601 | 30 | High-eff. Red | 611-634 | 1500 - 3600 | 70 | 1.83 (< 2.67) |
| TLWR7600 | | 30 | High-eff. Red | 611-634 | 1500 - 3000 | 70 | 1.83 (< 2.67) | 70 |
| TLWY7600 | | 30 | Yellow | 581-597 | 1000 - 2400 | 70 | 1.83 (< 2.67) | 70 |
| TLWO7600 | | 30 | Soft orange | 598-611 | 1500 - 3000 | 70 | 1.83 (< 2.67) | 70 |
| TLWTG7600 | | 30 | True green | 509-541 | 1800 (>630) | 50 | 4.2 (< 4.7) | 50 |
| TLWBG7600 | | 30 | Blue green | 492-514 | 1250 (>400) | 50 | 4.2 (< 4.7) | 50 |
| TLWB7600 | | 30 | Blue | 458-476 | 630 (>200) mlm | 50 | 4.3 (< 4.7) | 50 |
| TLWW7600 | | 30 | White | 5500 K | 1250 (>400) | 50 | 4.3 (< 5.1) | 50 |
| TLWR7901 | | 45 | High-eff. Red | 611-634 | 1500 - 4200 | 70 | 1.83 (< 2.67) | 70 |
| TLWR7900 | | 45 | High-eff. Red | 611-634 | 1500 - 3000 | 70 | 1.95 (< 2.67) | 70 |
| TLWO7900 | | 45 | Soft orange | 598-611 | 1500 - 3000 | 70 | 1.83 (< 2.67) | 70 |
| TLWY7900 | | 45 | Yellow | 581-597 | 1000 - 2400 | 70 | 1.95 (< 2.67) | 70 |
| TLWTG7900 | | 45 | True green | 509-541 | 1800 (>630) | 50 | 4.2 (< 4.7) | 50 |
| TLWBG7900 | | 45 | Blue green | 492-514 | 1250 (>400) | 50 | 4.2 (< 4.7) | 50 |
| TLWB7900 | | 45 | Blue | 458-476 | 630 (>200) mlm | 50 | 4.3 (< 4.7) | 50 |
| TLWW7900 | | 45 | White | 5500 K | 1250 (>400) | 50 | 4.3 (< 5.1) | 50 |
| TLWR8901 | | 45 | High-eff. Red | 611-634 | 4800 (>2000) | 70 | 2.2 (< 2.7) | 70 |
| TLWR8600 | | 30 | High-eff. Red | 611-634 | 3000 (>2000) | 70 | 2.0 (< 2.7) | 70 |
| TLWY8600 | | 30 | Yellow | 581-597 | 3000 (>2000) | 70 | 1.83 (< 2.7) | 70 |
| TLWR8900 | | 45 | High-eff. Red | 611-634 | 3000 (>2000) | 70 | 2.2 (< 2.7) | 70 |
| TLWY8900 | | 45 | Yellow | 581-597 | 3000 (>2000) | 70 | 2.1 (< 2.7) | 70 |
| TLWTG8900 | | 45 | True green | 509-541 | 2000 (>1000) | 50 | 4.4 (< 5.0) | 50 |
| TLWBG8900 | | 45 | Blue green | 492-514 | 13000 (>630) | 50 | 4.4 (< 5.0) | 50 |
| TLWB8900 | | 45 | Blue | 458-476 | 650 (>320) mlm | 50 | 4.4 (< 5.0) | 50 |
| TLWR9000 | | 55 | High-eff. Red | 611-634 | 3200 (>2500) | 70 | 1.83 (< 2.7) | 70 |
| TLWR96.. | | 30 | High-eff. Red | 611-634 | 3200 (>2500) | 70 | 1.83 (< 2.7) | 70 |
| TLWR99.. | | 30 | High-eff. Red | 611-634 | 3200 (>2500) | 70 | 1.83 (< 2.7) | 70 |
| TLWR9600 | | 30 | High-eff. Red | 611-634 | 3200 (>2500) | 70 | 1.83 (< 2.7) | 70 |
| TLWR9900 | | 45 | High-eff. Red | 611-634 | 3200 (>2500) | 70 | 1.83 (< 2.7) | 70 |
| TLWR9901 | | 45 | High-eff. Red | 611-634 | 6100 (>2500) | 70 | 1.83 (< 2.7) | 70 |
| TLWW8600 | | 30 | White | 5500 K | 1000 (>630) | 50 | 4.3 (< 5.2) | 50 |
| TLWW8900 | | 30 | White | 5500 K | 1000 (>630) | 50 | 4.3 (< 5.2) | 50 |
| TLWW9600 | | 30 | White | 5500 K | 1500 (>800) | 50 | 4.3 (< 5.1) | 50 |
| TLWW9900 | 45 | White | 5500 K | 1500 (>800) | 50 | 4.3 (< 5.2) | 50 | |

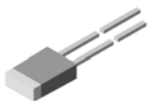
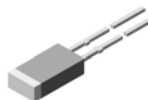


| DESCRIPTION | PART NUMBER | ANGLE $\pm\phi$ [°] | COLOR | WAVELENGTH [nm] | I _v [mcd] | @ I _F [mA] | V _F [V] | @ I _F [mA] |
|--|-------------|---------------------------|---------------|--------------------|-------------------------|--------------------------|-----------------------|--------------------------|
| Standard LEDs 1.8 mm T 3/4 with Lens Package  | TLUR2400 | 20 | Red | 630 | 0.8 (>0.4) | 10 | 1.6 (<2.0) | 20 |
| | TLUR2401 | 20 | Red | 630 | 1.5 (>1.0) | 10 | 1.6 (<2.0) | 20 |
| | TLUO2400 | 20 | Orange Red | 611-625 | 2.0 (>1.6) | 10 | 2.4 (<3.0) | 20 |
| | TLUO2401 | 20 | Orange Red | 611-625 | 5.0 (>4.0) | 10 | 2.4 (<3.0) | 20 |
| | TLUY2400 | 20 | Yellow | 581-597 | 4.0 (>1.4) | 10 | 2.4 (<3.0) | 20 |
| | TLUY2401 | 20 | Yellow | 581-597 | 8.0 (>2.5) | 10 | 2.4 (<3.0) | 20 |
| | TLUG2400 | 20 | Green | 564-577 | 5.0 (>1.6) | 10 | 2.4 (<3.0) | 20 |
| | TLUG2401 | 20 | Green | 564-577 | 12.0 (>4.0) | 10 | 2.4 (<3.0) | 20 |
| 3 mm T 1 Standard Package Standard LEDs  | TLDR4400 | 40 | Red | 645 | 45 (>25) | 20 | 1.8 (<2.2) | 20 |
| | TLDR4401 | 40 | Red | 645 | 25 to 50 | 20 | 1.8 (<2.2) | 20 |
| | TLDR4900 | 16 | Red | 645 | 200.0 (>63) | 20 | 1.8 (<2.2) | 20 |
| | TLDR4901 | 16 | Red | 645 | 63-200 | 20 | 1.8 (<2.2) | 20 |
| | TLHR4200 | 22 | Orange Red | 611-625 | 8.0 (>4.0) | 10 | 2.0 (<3.0) | 20 |
| | TLHR4201 | 22 | Orange Red | 611-625 | 10.0 (>6.3) | 10 | 2.0 (<3.0) | 20 |
| | TLHR4205 | 22 | Orange Red | 611-625 | 15.0 (>10.0) | 10 | 2.0 (<3.0) | 20 |
| | TLHO4200 | 22 | Orange Red | 611-625 | 10.0 (>4.0) | 10 | 2.4 (<3.0) | 20 |
| | TLHO4201 | 22 | Orange Red | 611-625 | 18.0 (>10.0) | 10 | 2.4 (<3.0) | 20 |
| | TLHY4200 | 22 | Yellow | 581-597 | 10.0 (>4.0) | 10 | 2.4 (<3.0) | 20 |
| | TLHY4201 | 22 | Yellow | 581-597 | 15.0 (>6.3) | 10 | 2.4 (<3.0) | 20 |
| | TLHY4205 | 22 | Yellow | 581-597 | 20.0 (>10.0) | 10 | 2.4 (<3.0) | 20 |
| | TLHG4200 | 22 | Green | 564-577 | 10.0 (>6.3) | 10 | 2.4 (<3.0) | 20 |
| | TLHG4201 | 22 | Green | 564-577 | 15.0 (>10.0) | 10 | 2.4 (<3.0) | 20 |
| | TLHG4205 | 22 | Green | 564-577 | 20.0 (>16.0) | 10 | 2.4 (<3.0) | 20 |
| | TLHP4200 | 22 | Pure green | 555-567 | 7 (>2.5) | 10 | 2.4 (<3.0) | 20 |
| | TLHP4201 | 22 | Pure green | 555-567 | >6.3 | 10 | 2.4 (<3.0) | 20 |
| | TLHR4400 | 30 | Orange Red | 611-625 | 3.0 (>1.6) | 10 | 2.0 (<3.0) | 20 |
| | TLHR4401 | 30 | Orange Red | 611-625 | 5.0 (>2.5) | 10 | 2.0 (<3.0) | 20 |
| | TLHR4405 | 30 | Orange Red | 611-625 | 10.0 (>6.3) | 10 | 2.0 (<3.0) | 20 |
| | TLHO4400 | 30 | Orange Red | 611-625 | 4.0 (>1.6) | 10 | 2.4 (<3.0) | 20 |
| | TLHY4400 | 30 | Yellow | 581-597 | 3.0 (>1.6) | 10 | 2.4 (<3.0) | 20 |
| | TLHY4401 | 30 | Yellow | 581-597 | 5.0 (>2.5) | 10 | 2.4 (<3.0) | 20 |
| | TLHY4405 | 30 | Yellow | 581-597 | 10.0 (>6.3) | 10 | 2.4 (<3.0) | 20 |
| | TLHG4400 | 30 | Green | 564-577 | 4.0 (>2.5) | 10 | 2.4 (<3.0) | 20 |
| | TLHG4401 | 30 | Green | 564-577 | 6.0 (>4.0) | 10 | 2.4 (<3.0) | 20 |
| | TLHG4405 | 30 | Green | 564-577 | 12.0 (>6.3) | 10 | 2.4 (<3.0) | 20 |
| | TLHP4400 | 30 | Pure green | 555-567 | 2.0 (>0.63) | 10 | 2.4 (<3.0) | 20 |
| | TLHP4401 | 30 | Pure green | 555-567 | 3.0 (>0.1) | 10 | 2.4 (<3.0) | 20 |
| | TLHP4405 | 30 | Pure green | 555-567 | 3.5 (>0.1.6) | 10 | 2.4 (<3.0) | 20 |
| | TLHR4600 | 60 | High-eff. Red | 635 | 2.0 (>1.0) | 10 | 2.0 (<3.0) | 20 |
| | TLHR4601 | 60 | High-eff. Red | 635 | 3.5 (>1.6) | 10 | 2.0 (<3.0) | 20 |
| TLHR4605 | 60 | High-eff. Red | 635 | 6.0 (>2.5) | 10 | 2.0 (<3.0) | 20 | |
| TLHY4600 | 60 | Yellow | 581-597 | 2.0 (>0.63) | 10 | 2.4 (<3.0) | 20 | |
| TLHY4601 | 60 | Yellow | 581-597 | 3.5 (>1.0) | 10 | 2.4 (<3.0) | 20 | |
| TLHY4605 | 60 | Yellow | 581-597 | 5.0 (>2.5) | 10 | 2.4 (<3.0) | 20 | |
| TLHG4600 | 60 | Green | 564-577 | 2.0 (>1.0) | 10 | 2.4 (<3.0) | 20 | |
| TLHG4601 | 60 | Green | 564-577 | 3.5 (>1.6) | 10 | 2.4 (<3.0) | 20 | |
| TLHG4605 | 60 | Green | 564-577 | 6.0 (>4.0) | 10 | 2.4 (<3.0) | 20 | |




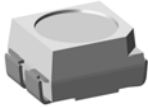
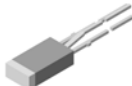
| DESCRIPTION | PART NUMBER | ANGLE $\pm\varphi$ [°] | COLOR | WAVELENGTH [nm] | I _v [mcd] | @ I _F [mA] | V _F [V] | @ I _F [mA] | |
|---|---|------------------------------|---------------|--------------------|-------------------------|--------------------------|-----------------------|--------------------------|----|
| 3 mm T 1 Standard Package Standard LEDs  | TLHR4900 | 16 | Orange Red | 611-625 | 13.0 (>6.3) | 10 | 2.0 (<3.0) | 20 | |
| | TLHO4900 | 16 | Orange Red | 611-625 | 26.0 (>10.0) | 10 | 2.4 (<3.0) | 20 | |
| | TLHY4900 | 16 | Yellow | 581-597 | 26.0 (>10.0) | 10 | 2.4 (<3.0) | 20 | |
| | TLHG4900 | 16 | Green | 564-577 | 37.0 (>16.0) | 10 | 2.4 (<3.0) | 20 | |
| | TLHP4900 | 16 | Pure green | 555-567 | 13.0 (>4.0) | 10 | 2.4 (<3.0) | 20 | |
| | TLHB4200 | 22 | Blue | 458-476 | 50 (> 25) | 20 | 3.9 (< 4.5) | 20 | |
| | TLHB4201 | 22 | Blue | 458-476 | 40-132 | 20 | 3.9 (< 4.5) | 20 | |
| | TLHB4400 | 30 | Blue | 458-476 | 15 (> 6.3) | 20 | 3.9 (< 4.5) | 20 | |
| | TLHB4401 | 30 | Blue | 458-476 | 10-32 | 20 | 3.9 (< 4.5) | 20 | |
| | TLHE4200 | 22 | Yellow | 581-597 | 120 (>40) | 10 | 1.9 (<2.6) | 20 | |
| | TLHE4400 | 30 | Yellow | 581-597 | 80 (>25) | 10 | 1.9 (<2.6) | 20 | |
| | TLHE4600 | 60 | Yellow | 581-597 | 26 (>10) | 10 | 1.9 (<2.6) | 20 | |
| | TLHE4900 | 16 | Yellow | 581-597 | 300 (>66) | 10 | 1.9 (<2.6) | 20 | |
| | TLHF4200 | 22 | Orange Red | 611-625 | 120 (>40) | 10 | 1.9 (<2.6) | 20 | |
| | TLHF4600 | 60 | Orange Red | 611-625 | 26 (>10) | 10 | 1.9 (<2.6) | 20 | |
| | TLHF4900 | 16 | Orange Red | 611-625 | 300 (>66) | 10 | 1.9 (<2.6) | 20 | |
| | TLHK4200 | 22 | Super Red | 624-639 | 50 (>25) | 10 | 1.9 (<2.6) | 20 | |
| | TLHK4400 | 30 | Super Red | 624-639 | 140 (>16) | 10 | 1.9 (<2.6) | 20 | |
| | TLHK4600 | 60 | Super Red | 624-639 | 15 (>6.3) | 10 | 1.9 (<2.6) | 20 | |
| | TLHK4900 | 16 | Super Red | 624-639 | 140 (>40) | 10 | 1.9 (<2.6) | 20 | |
| | TLHR4206 | 22 | High-eff. Red | 620-628 | 50 (> 16) | 10 | 2 (< 3) | 20 | |
| | TLUR4400 | 30 | Red | 640 | 12 (>6.3) | 10 | 2 (<3.0) | 20 | |
| | TLUR4401 | 30 | Red | 640 | 6.3 - 20 | 10 | 2 (<3.0) | 20 | |
| | TLHW4900 | 16 | White | 5500 K | 240-500 | 20 | 3.5 (< 4.2) | 20 | |
| | TLHW4901 | 16 | White | 5500 K | 860 (> 240) | 20 | 3.5 (< 4.2) | 20 | |
| | 5 mm T 1 3/4 Standard Package Standard LEDs  | TLDR5400 | 30 | Red | 645 | 70 (>35) | 20 | 1.8 (<2.2) | 20 |
| | | TLDR5800 | 4 | Red | 645 | 2500 (>1000) | 20 | 1.8 (<2.2) | 20 |
| TLHK5100 | | 9 | Super Red | 624-639 | >320 | 20 | 1.9 (<2.6) | 20 | |
| TLHK5101 | | 9 | Super Red | 624-639 | 320-640 | 20 | 1.9 (<2.6) | 20 | |
| TLHK5102 | | 9 | Super Red | 624-639 | 320-860 | 20 | 1.9 (<2.6) | 20 | |
| TLHE5100 | | 9 | Yellow | 581-597 | >750 | 20 | 2.0 (<2.6) | 20 | |
| TLHE5101 | | 9 | Yellow | 581-597 | 750-1500 | 20 | 2.0 (<2.6) | 20 | |
| TLHE5102 | | 9 | Yellow | 581-597 | 750-2000 | 20 | 2.0 (<2.6) | 20 | |
| TLHG5100 | | 9 | Green | 564-577 | >240 | 20 | 2.4 (<3.0) | 20 | |
| TLHG5101 | | 9 | Green | 564-577 | 240-480 | 20 | 2.4 (<3.0) | 20 | |
| TLHG5102 | | 9 | Green | 564-577 | 240-640 | 20 | 2.4 (<3.0) | 20 | |
| TLHP5100 | | 9 | Pure green | 555-567 | >66 | 20 | 2.4 (<3.0) | 20 | |
| TLHP5101 | | 9 | Pure green | 555-567 | 66-132 | 20 | 2.4 (<3.0) | 20 | |
| TLHP5102 | | 9 | Pure green | 555-567 | 66-200 | 20 | 2.4 (<3.0) | 20 | |
| TLHR5200 | | 14 | High-eff. Red | 635 | 20 (>10) | 10 | 2.0 (<3.0) | 20 | |
| TLHR5201 | | 14 | High-eff. Red | 635 | 30 (>16) | 10 | 2.0 (<3.0) | 20 | |
| TLHR5205 | | 14 | High-eff. Red | 635 | 40 (>25) | 10 | 2.0 (<3.0) | 20 | |
| TLHY5200 | | 14 | Yellow | 581-597 | 30 (>10) | 10 | 2.4 (<3.0) | 20 | |
| TLHY5201 | | 14 | Yellow | 581-597 | 40 (>16) | 10 | 2.4 (<3.0) | 20 | |
| TLHY5205 | | 14 | Yellow | 581-597 | 50 (>25) | 10 | 2.4 (<3.0) | 20 | |
| TLHG5200 | | 14 | Green | 564-577 | 30 (>16) | 10 | 2.4 (<3.0) | 20 | |
| TLHG5201 | | 14 | Green | 564-577 | 40 (>25) | 10 | 2.4 (<3.0) | 20 | |
| TLHG5205 | | 14 | Green | 564-577 | 50 (>40) | 10 | 2.4 (<3.0) | 20 | |

| DESCRIPTION | PART NUMBER | ANGLE ±φ [°] | COLOR | WAVELENGTH [nm] | I _v [mcd] | @ I _F [mA] | V _F [V] | @ I _F [mA] |
|---|-------------|--------------------|---------------|--------------------|-------------------------|--------------------------|-----------------------|--------------------------|
| 5 mm T 1 3/4 Standard Package Standard LEDs  | TLHR5400 | 30 | High-eff. Red | 635 | 3.5 (>1.6) | 10 | 2.0 (<3.0) | 20 |
| | TLHR5401 | 30 | High-eff. Red | 635 | 7.0 (>4.0) | 10 | 2.0 (<3.0) | 20 |
| | TLHR5405 | 30 | High-eff. Red | 635 | 10.0 (>6.3) | 10 | 2.0 (<3.0) | 20 |
| | TLHY5400 | 30 | Yellow | 581-597 | 3.5 (>1.6) | 10 | 2.4 (<3.0) | 20 |
| | TLHY5401 | 30 | Yellow | 581-597 | 7.0 (>4.0) | 10 | 2.4 (<3.0) | 20 |
| | TLHY5405 | 30 | Yellow | 581-597 | 10.0 (>6.3) | 10 | 2.4 (<3.0) | 20 |
| | TLHG5400 | 30 | Green | 564-577 | 4.0 (>1.6) | 10 | 2.4 (<3.0) | 20 |
| | TLHG5401 | 30 | Green | 564-577 | 7.0 (>4.0) | 10 | 2.4 (<3.0) | 20 |
| | TLHG5405 | 30 | Green | 564-577 | 15.0 (>6.3) | 10 | 2.4 (<3.0) | 20 |
| | TLHY5800 | 4 | Yellow | 581-597 | 250 (>100) | 20 | 2.4 (<3.0) | 20 |
| | TLHG5800 | 4 | Green | 564-577 | 700 (>400) | 20 | 2.4 (<3.0) | 20 |
| | TLHP5800 | 4 | Pure green | 555-567 | 85 (>25) | 20 | 2.4 (<3.0) | 20 |
| | TLHB5100 | 9 | Blue | 458-476 | 210 (> 66) | 20 | 3.9 (< 4.5) | 20 |
| | TLHB5102 | 9 | Blue | 458-476 | 130-360 | 20 | 3.9 (< 4.5) | 20 |
| | TLHB5400 | 30 | Blue | 458-476 | 15 (> 6.3) | 20 | 3.9 (< 4.5) | 20 |
| | TLHB5401 | 30 | Blue | 458-476 | 10-32 | 20 | 3.9 (< 4.5) | 20 |
| | TLHB5800 | 22 | Blue | 458-476 | 380 (> 130) | 20 | 3.9 (< 4.5) | 20 |
| | TLHB5801 | 22 | Blue | 458-476 | 240-640 | 20 | 3.9 (< 4.5) | 20 |
| | TLHE5400 | 30 | Yellow | 581-597 | 60 (>16) | 10 | 2.0 (<2.6) | 20 |
| | TLHE5800 | 4 | Yellow | 581-597 | 3500 (>1000) | 20 | 2.0 (<2.6) | 20 |
| | TLHF5400 | 30 | Orange Red | 611-625 | 60 (>16) | 10 | 2.0 (<2.6) | 20 |
| | TLHF5800 | 4 | Orange Red | 611-625 | 3500 (>1000) | 20 | 2.0 (<2.6) | 20 |
| | TLHK5400 | 30 | Super Red | 624-639 | 26 (>10) | 10 | 2.0 (<2.6) | 20 |
| | TLHK5800 | 4 | Super Red | 624-639 | 2500 (> 1000) | 10 | 1.9 (> 2.6) | 20 |
| | TLUR5400 | 30 | Red | 640 | 15 (>4) | 10 | 2 (<3.0) | 20 |
| | TLUR5401 | 30 | Red | 640 | 4 - 32 | 10 | 2 (<3.0) | 20 |
| | TLCW5100 | 9 | White | 5500 K | 1000-4000 | 30 | 3.9 (< 4.5) | 30 |
| | TLHW5100 | 9 | White | 5500 K | 575-1000 | 20 | 3.5 (< 4.2) | 20 |
| | TLHW5400 | 30 | White | 5500 K | 180-350 | 20 | 3.5 (< 4.2) | 20 |
| | TLHR6200 | 14 | High-eff. Red | 635 | 20 (>10) | 10 | 2.0 (<3.0) | 20 |
| | TLHR6201 | 14 | High-eff. Red | 635 | 30 (>16) | 10 | 2.0 (<3.0) | 20 |
| | TLHR6205 | 14 | High-eff. Red | 635 | 40 (>25) | 10 | 2.0 (<3.0) | 20 |
| TLHY6200 | 14 | Yellow | 581-597 | 30 (>10) | 10 | 2.4 (<3.0) | 20 | |
| TLHY6201 | 14 | Yellow | 581-597 | 40 (>16) | 10 | 2.4 (<3.0) | 20 | |
| TLHY6205 | 14 | Yellow | 581-597 | 50 (>25) | 10 | 2.4 (<3.0) | 20 | |
| TLHG6200 | 14 | Green | 564-577 | 30 (>16) | 10 | 2.4 (<3.0) | 20 | |
| TLHG6201 | 14 | Green | 564-577 | 40 (>25) | 10 | 2.4 (<3.0) | 20 | |
| TLHG6205 | 14 | Green | 564-577 | 50 (>40) | 10 | 2.4 (<3.0) | 20 | |
| TLHR6400 | 30 | High-eff. Red | 635 | 3.5 (>1.6) | 10 | 2.0 (<3.0) | 20 | |
| TLHR6401 | 30 | High-eff. Red | 635 | 7.0 (>4.0) | 10 | 2.0 (<3.0) | 20 | |
| TLHR6405 | 30 | High-eff. Red | 635 | 10.0 (>6.3) | 10 | 2.0 (<3.0) | 20 | |
| TLHY6400 | 30 | Yellow | 581-597 | 3.5 (>1.6) | 10 | 2.4 (<3.0) | 20 | |
| TLHY6401 | 30 | Yellow | 581-597 | 7.0 (>4.0) | 10 | 2.4 (<3.0) | 20 | |
| TLHY6405 | 30 | Yellow | 581-597 | 10.0 (>6.3) | 10 | 2.4 (<3.0) | 20 | |
| TLHG6400 | 30 | Green | 564-577 | 4.0 (>1.6) | 10 | 2.4 (<3.0) | 20 | |
| TLHG6401 | 30 | Green | 564-577 | 7.0 (>4.0) | 10 | 2.4 (<3.0) | 20 | |
| TLHG6405 | 30 | Green | 564-577 | 15.0 (>6.3) | 10 | 2.4 (<3.0) | 20 | |
| TLUR6400 | 30 | Red | 640 | 15 (>4) | 10 | 2 (<3.0) | 20 | |
| TLUR6401 | 30 | Red | 640 | 4 - 32 | 10 | 2 (<3.0) | 20 | |

| DESCRIPTION | PART NUMBER | ANGLE $\pm\phi$ [°] | COLOR | WAVELENGTH [nm] | I _v [mcd] | @ I _F [mA] | V _F [V] | @ I _F [mA] |
|--|-------------|---------------------------|---------------|--------------------|-------------------------|--------------------------|-----------------------|--------------------------|
| Low Current LEDs 3 mm T 1 Standard Package  | TLLR4400 | 25 | High-eff. Red | 635 | 1.2 (>0.63) | 2 | 1.9 (<2.4) | 2 |
| | TLLR4401 | 25 | High-eff. Red | 635 | 2.0 (>1.0) | 2 | 1.9 (<2.4) | 2 |
| | TLLY4400 | 25 | Yellow | 581-597 | 1.2 (>0.63) | 2 | 2.4 (<2.9) | 2 |
| | TLLY4401 | 25 | Yellow | 581-597 | 2.0 (>1.0) | 2 | 2.4 (<2.9) | 2 |
| | TLLG4400 | 25 | Green | 564-577 | 1.2 (>0.63) | 2 | 1.9 (<2.4) | 2 |
| | TLLG4401 | 25 | Green | 564-577 | 2.0 (>1.0) | 2 | 1.9 (<2.4) | 2 |
| 5 mm T 1 3/4 Standard Package Low Current LEDs  | TLLR5400 | 25 | High-eff. Red | 635 | 1.2 (>0.63) | 2 | 1.9 (<2.4) | 2 |
| | TLLR5401 | 25 | High-eff. Red | 635 | 2.0 (>1.0) | 2 | 1.9 (<2.4) | 2 |
| | TLLY5400 | 25 | Yellow | 581-597 | 1.2 (>0.63) | 2 | 2.4 (<2.9) | 2 |
| | TLLY5401 | 25 | Yellow | 581-597 | 2.0 (>1.0) | 2 | 2.4 (<2.9) | 2 |
| | TLLG5400 | 25 | Green | 564-577 | 1.2 (0.63) | 2 | 1.9 (<2.4) | 2 |
| | TLLG5401 | 25 | Green | 564-577 | 2.0 (>1.0) | 2 | 1.9 (<2.4) | 2 |
| SMD LEDs SMD 2-pad MiniLED Package  | TLMS2100 | 60 | Super Red | 624-636 | 7.5 (>2.5) | 10 | 2.1 (<3.0) | 20 |
| | TLMO2100 | 60 | Soft orange | 598-611 | 7.5 (>3.2) | 10 | 2.1 (<3.0) | 20 |
| | TLMY2100 | 60 | Yellow | 581-594 | 7.5 (>3.2) | 10 | 2.2 (<3.0) | 20 |
| | TLMG2100 | 60 | Green | 562-575 | 10 (>6.3) | 10 | 2.2 (<3.0) | 20 |
| | TLMP2100 | 60 | Pure green | 555-565 | 2.2 (>1.0) | 10 | 2.4 (<3.0) | 20 |
| | TLMB2100 | 60 | Blue | 458-476 | 7.0 (>4.0) | 10 | 3.9 (<4.5) | 20 |
| | TLMK2300 | 60 | Super Red | 630 | 80 (>32) | 20 | 1.9 (<2.6) | 20 |
| | TLMF2300 | 60 | Soft orange | 598-611 | 120 (>50) | 20 | 2.0 (<2.6) | 20 |
| | TLME2300 | 60 | Yellow | 581-597 | 120 (>50) | 20 | 2.0 (<2.6) | 20 |
| SMD PLCC2 Package SMD LEDs  | TLMH3100 | 60 | High-eff. Red | 635 | 6.0 (>2.5) | 10 | 2.4 (<3.0) | 20 |
| | TLMH3101 | 60 | High-eff. Red | 635 | 4.0 -12.5 | 10 | 2.2 (<2.6) | 20 |
| | TLMH3102 | 60 | High-eff. Red | 635 | 6.3-20 | 10 | 2.2 (<2.6) | 20 |
| | TLMO3100 | 60 | Orange Red | 611-625 | 8.0 (>2.5) | 10 | 2.4 (<3.0) | 20 |
| | TLMO3101 | 60 | Orange Red | 611-625 | 4.0 -12.5 | 10 | 2.4 (<3.0) | 20 |
| | TLMY3100 | 60 | Yellow | 581-597 | 5.0 (>2.5) | 10 | 2.4 (<3.0) | 20 |
| | TLMY3101 | 60 | Yellow | 581-597 | 4.0 -12.5 | 10 | 2.2 (<2.6) | 20 |
| | TLMY3102 | 60 | Yellow | 581-597 | 6.3-20 | 10 | 2.2 (<2.6) | 20 |
| | TLMG3100 | 60 | Green | 564-577 | 9.0 (>4.0) | 10 | 2.4 (<3.0) | 20 |
| | TLMG3101 | 60 | Green | 564-577 | 6.3-12.5 | 10 | 2.4 (<3.0) | 20 |
| | TLMG3102 | 60 | Green | 564-578 | 10-20 | 10 | 2.4 (<3.0) | 20 |
| | TLMG3105 | 60 | Green | 564-579 | 6.3-20 | 10 | 2.4 (<3.0) | 20 |
| | TLMG3106 | 60 | Green | 564-580 | 6.3 -12.5 | 10 | 2.4 (<3.0) | 20 |
| | TLMP3100 | 60 | Pure green | 555-567 | 4.0 (>1.0) | 10 | 2.4 (<3.0) | 20 |
| | TLMP3101 | 60 | Pure green | 555-567 | 1.6 -5.0 | 10 | 2.4 (<3.0) | 20 |
| | TLMP3106 | 60 | Pure green | 555-567 | 1.6 -3.2 | 10 | 2.4 (<3.0) | 20 |
| | TLMP3107 | 60 | Pure green | 555-567 | 2.5 -5.0 | 10 | 2.4 (<3.0) | 20 |
| | TLMP3102 | 60 | Pure green | 555-567 | 2.5-8.0 | 10 | 2.4 (<3.0) | 20 |
| | TLMK3300 | 60 | Super Red | 624-639 | 500 (>200) | 50 | 185 (<2.55) | 50 |
| | TLMK3301 | 60 | Super Red | 624-639 | 250-800 | 50 | 185 (<2.55) | 50 |
| | TLMK3302 | 60 | Super Red | 624-639 | 400-800 | 50 | 185 (<2.55) | 50 |
| | TLMK3303 | 60 | Super Red | 624-639 | 400-1250 | 50 | 185 (<2.55) | 50 |

| DESCRIPTION | PART NUMBER | ANGLE ±φ [°] | COLOR | WAVELENGTH [nm] | I _v [mcd] | @ I _F [mA] | V _F [V] | @ I _F [mA] |
|--|-------------|--------------------|---------------|--------------------|-------------------------|--------------------------|-----------------------|--------------------------|
| SMD PLCC2 Package SMD LEDs  | TLMS3300 | 60 | Super Red | 624-639 | 300 (>160) | 50 | 185 (<2.55) | 50 |
| | TLMS3301 | 60 | Super Red | 624-639 | 160-400 | 50 | 185 (<2.55) | 50 |
| | TLMS3302 | 60 | Super Red | 624-639 | 250-800 | 50 | 185 (<2.55) | 50 |
| | TLMO3300 | 60 | Soft orange | 598-611 | 500 (>200) | 50 | 185 (<2.55) | 50 |
| | TLMO3301 | 60 | Soft orange | 598-611 | 250-640 | 50 | 185 (<2.55) | 50 |
| | TLMO3302 | 60 | Soft orange | 598-611 | 320-800 | 50 | 185 (<2.55) | 50 |
| | TLMO3303 | 60 | Soft orange | 598-611 | 400-1250 | 50 | 185 (<2.55) | 50 |
| | TLMY3300 | 60 | Yellow | 581-597 | 450 (>200) | 50 | 185 (<2.55) | 50 |
| | TLMY3301 | 60 | Yellow | 581-597 | 250-640 | 50 | 185 (<2.55) | 50 |
| | TLMY3302 | 60 | Yellow | 581-597 | 320-800 | 50 | 185 (<2.55) | 50 |
| | TLMY3303 | 60 | Yellow | 581-597 | 400-1250 | 50 | 185 (<2.55) | 50 |
| | TLMA3100 | 60 | Yellow | 581-597 | 2.5 (>0.25) | 2 | 2.2 (<2.9) | 2 |
| | TLMB3100 | 60 | Blue | 458-476 | 8.0 (>4.0) | 10 | 3.9 (<4.5) | 20 |
| | TLMB3101 | 60 | Blue | 458-476 | 4.0-12.5 | 10 | 3.9 (<4.5) | 20 |
| | TLMB3104 | 60 | Blue | 458-476 | 5.0-12.5 | 10 | 3.9 (<4.5) | 20 |
| | TLMB3106 | 60 | Blue | 458-476 | 5.0-20 | 10 | 3.9 (<4.5) | 20 |
| | TLMB3140 | 60 | Blue | 458-476 | >20 | 20 | 3.5 (<4.2) | 20 |
| | TLMBG3100 | 60 | Blue green | 492-514 | >66 | 20 | 3.5 (<4.2) | 20 |
| | TLMTG3100 | 60 | True green | 509-541 | >80 | 20 | 3.5 (<4.2) | 20 |
| | TLMC3100 | 60 | Green | 564-577 | 1.6 (>0.63) | 2 | 2.2 (<2.9) | 2 |
| | TLMC3101 | 60 | Green | 564-577 | 1.6 (>1.0) | 2 | 2.2 (<2.9) | 2 |
| | TLMD3100 | 60 | Red | 645 | 20 (>10) | 10 | 1.8 (<2.2) | 20 |
| | TLMD3101 | 60 | Red | 645 | 16-50 | 10 | 1.8 (<2.2) | 20 |
| | TLMD3102 | 60 | Red | 645 | 10-20 | 10 | 1.8 (<2.2) | 20 |
| | TLMD3105 | 60 | Red | 645 | 10-32 | 10 | 1.8 (<2.2) | 20 |
| | TLME3100 | 60 | Yellow | 581-597 | 50 (>25) | 10 | 2.0 (<2.6) | 20 |
| | TLME3101 | 60 | Yellow | 581-597 | 32-100 | 10 | 2.0 (<2.6) | 20 |
| | TLME3102 | 60 | Yellow | 581-597 | 20-64 | 10 | 2.0 (<2.6) | 20 |
| | TLME3105 | 60 | Yellow | 581-597 | 50-160 | 10 | 2.0 (<2.6) | 20 |
| | TLMF3100 | 60 | Orange Red | 611-625 | 50 (>25) | 10 | 2.0 (<2.6) | 20 |
| | TLMF3101 | 60 | Orange Red | 611-625 | 40-125 | 10 | 2.0 (<2.6) | 20 |
| | TLMF3102 | 60 | Orange Red | 611-625 | 32-100 | 10 | 2.0 (<2.6) | 20 |
| | TLMK3100 | 60 | Super Red | 624-639 | 18 (>10) | 10 | 1.9 (<2.6) | 20 |
| | TLMK3102 | 60 | Super Red | 624-639 | 20-64 | 10 | 1.9 (<2.6) | 20 |
| | TLMK3105 | 60 | Super Red | 624-639 | 32-100 | 10 | 1.9 (<2.6) | 20 |
| | TLMS3100 | 60 | Super Red | 624-639 | 7.5(>2.5) | 10 | 2.0(<2.6) | 20 |
| | TLMS3101 | 60 | Super Red | 624-639 | 4-12.5 | 10 | 2.0(<2.6) | 20 |
| | TLMT3100 | 60 | High-eff. Red | 635 | 2.5 (>0.25) | 2 | 2.2 (<2.9) | 2 |
| | TLMW3100 | 60 | White | 5500 K | 140 (>80) | 20 | 3.5 (<4.2) | 20 |
| | TLMW3101 | 60 | White | 5500 K | 81-200 | 20 | 3.5 (<4.2) | 20 |
| TLMW3102 | 60 | White | 5500 K | 125-320 | 20 | 3.5 (<4.2) | 20 | |
| TLMW3145 | 60 | White | 5500 K | 40-100 | 10 | 3.5 (<4.0) | 10 | |

| DESCRIPTION | PART NUMBER | ANGLE $\pm\varphi$ [°] | COLOR | WAVELENGTH [nm] | I _v [mcd] | @ I _F [mA] | V _F [V] | @ I _F [mA] |
|--|-------------|------------------------------|---------------|--------------------|-------------------------|--------------------------|------------------------|--------------------------|
| Symbol LEDs 2 mm x 5 mm Symbol Package  | TLSH2100 | 50 | Red | 650 | 2.0 (>0.63) | 10 | 2.0 (<3.0) | 20 |
| | TLSH2101 | 50 | Red | 650 | 2.5 (>1.0) | 10 | 2.0 (<3.0) | 20 |
| | TLSY2100 | 50 | Yellow | 581-597 | 2.0 (>0.63) | 10 | 2.4 (<3.0) | 20 |
| | TLSY2101 | 50 | Yellow | 581-597 | 2.0 (>1.0) | 10 | 2.4 (<3.0) | 20 |
| | TLSG2100 | 50 | Green | 564-577 | 2.0 (>1.0) | 10 | 2.4 (<3.0) | 20 |
| | TLSG2101 | 50 | Green | 564-577 | 2.5 (>1.6) | 10 | 2.4 (<3.0) | 20 |
| 2.5 mm x 5 mm Symbol Package Symbol LEDs  | TLSH5100 | 50 | Red | 650 | 1.5 (>0.63) | 10 | 2.0 (<3.0) | 20 |
| | TLSH5101 | 50 | Red | 650 | 2.0 (>1.0) | 10 | 2.0 (<3.0) | 20 |
| | TLSY5100 | 50 | Yellow | 581-597 | 1.0 (>0.4) | 10 | 2.4 (<3.0) | 20 |
| | TLSY5101 | 50 | Yellow | 581-597 | 3.0 (>1.0) | 10 | 2.4 (<3.0) | 20 |
| | TLSG5100 | 50 | Green | 564-577 | 1.0 (>0.4) | 10 | 2.4 (<3.0) | 20 |
| | TLSG5101 | 50 | Green | 564-577 | 2.0 (>1.0) | 10 | 2.4 (<3.0) | 20 |
| Side-View LEDs Side View with Lens Package  | TLPR5600 | 80 | Red | 630 | 2.5 (>1) | 10 | 2.0 (<3.0) | 20 |
| | TLPH5600 | 80 | High-eff. Red | 635 | 1.5 (>0.63) | 10 | 2.0 (<3.0) | 20 |
| | TLPY5600 | 80 | Yellow | 581-597 | 1.5 (>0.63) | 10 | 2.4 (<3.0) | 20 |
| | TLPG5600 | 80 | Green | 564-577 | 1.5 (>0.63) | 10 | 2.4 (<3.0) | 20 |
| | TLPP5600 | 80 | Pure green | 555-567 | 1.6 (>0.63) | 10 | 2.4 (<3.0) | 20 |
| DESCRIPTION | PART NUMBER | ANGLE $\pm\varphi$ [°] | COLOR | WAVELENGTH [nm] | I _v [mcd] | @V _F [V] | I _F [mA] | @V _F [V] |
| Resistor LEDs 3 mm T 1 Standard Package  | TLRP4400 | 30 | Pure green | 555-567 | 3.0 (>0.63) | 12 (ESD safe) | 10 | 12 |
| | TLRP4401 | 30 | Pure green | 555-567 | 4.0 (>1.6) | 12 (ESD safe) | 10 | 12 |
| | TLRP4406 | 30 | Pure green | 555-567 | 3.0 - 5.0 | 12 (ESD safe) | 10 | 12 |
| | TLRH4400 | 30 | High-eff. Red | 635 | 4.0 (>1.6) | 12 (ESD safe) | 10 | 12 |
| | TLRO4400 | 30 | Orange Red | 611-625 | 12.0 (>4.0) | 12 (ESD safe) | 10 | 12 |
| | TLRY4400 | 30 | Yellow | 581-597 | 4.0 (>1.6) | 12 (ESD safe) | 10 | 12 |
| | TLRG4400 | 30 | Green | 564-577 | 4.0 (>1.6) | 12 (ESD safe) | 10 | 12 |
| | TLRH4420 | 30 | High-eff. Red | 635 | 4.0 (>1.6) | 12 | 10 | 12 |
| | TLRO4420 | 30 | Orange Red | 611-625 | 12.0 (>4.0) | 12 | 10 | 12 |
| | TLRY4420 | 30 | Yellow | 581-597 | 4.0 (>1.6) | 12 | 10 | 12 |
| | TLRG4420 | 30 | Green | 564-577 | 4.0 (>1.6) | 12 | 10 | 12 |
| | TLRE4200 | 22 | Yellow | 581-597 | >25 | 12 | 10 | 12 |
| | TLRY4200 | 22 | Yellow | 581-597 | >6.3 | 12 | 10 | 12 |
| | TLRP4900 | 16 | Pure green | 555-567 | 11 (>4) | 12 | 10 | 12 |

| DESCRIPTION | PART NUMBER | ANGLE $\pm\varphi$ [°] | COLOR | WAVELENGTH [nm] | I _v [mcd] | @ I _F [mA] | V _F [V] | @ I _F [mA] |
|---|-------------|------------------------------|---------------|--------------------|-------------------------|--------------------------|----------------------------|--------------------------|
| Backlighting LEDs 3 mm T 1 V-Lens Package  | TLVD4200 | 85 | Red | 645 | 80 (>40) mlm | 15 | 1.8 (<2.2) | 20 |
| | TLVH4200 | 85 | High-eff. Red | 635 | 25 (>10) mlm | 15 | 2.4 (<3.0) | 20 |
| | TLVH4201 | 85 | High-eff. Red | 635 | 16 -32 mlm | 15 | 2.4 (<3.0) | 20 |
| | TLVS4200 | 85 | Orange Red | 611-625 | 25 (>10) mlm | 15 | 2.4 (<3.0) | 20 |
| | TLVY4200 | 85 | Yellow | 581-597 | 20 (>10) mlm | 15 | 2.4 (<3.0) | 20 |
| | TLVG4200 | 85 | Green | 564-577 | 30 (>10) mlm | 15 | 2.4 (<3.0) | 20 |
| | TLVP4200 | 85 | Pure green | 555-567 | 10 (>4) mlm | 15 | 2.4 (<3.0) | 20 |
| | TLVB4200 | 85 | Blue | 458-476 | 38 (> 25) mlm | 15 | 3.9 (< 4.5) | 20 |
| DESCRIPTION | PART NUMBER | ANGLE $\pm\varphi$ [°] | COLOR | WAVELENGTH [nm] | I _v [mcd] | @ V _S [V] | FLASH FREQUENCY [Hz] | I _F [mA] |
| Blinking LEDs 5 mm T 1 3/4 Standard Package  | TLBR5410 | 40 | Red | 660 | 1.6 (>1) | 5 | 3 | 10 (10-30) |
| DESCRIPTION | PART NUMBER | ANGLE $\pm\varphi$ [°] | COLOR | WAVELENGTH [nm] | I _v [mcd] | @ I _F [mA] | V _F [V] | @ I _F [mA] |
| Bi-Color LEDs 5 mm T 1 3/4 3-pin Package  | TLUV5300R | 30 | High-eff. Red | 635 | 2.5 (>1.0) | 10 | 2.0 (<3.0) | 20 |
| | TLUV5300G | 30 | Green | 564-577 | 2.5 (>1.0) | 10 | 2.4 (<3.0) | 20 |
| SMD PLCC2 3-pad Package Bi-Color LEDs  | TLMEK3100R | 60 | High-eff. Red | 635 | 6.0 (>2.5) | 10 | 2.4 (<3.0) | 20 |
| | TLMEK3100Y | 60 | Yellow | 581-597 | 6.0 (>2.5) | 10 | 2.4 (<3.0) | 20 |
| | TLMV3100H | 60 | High-eff. Red | 635 | 6.0 (>2.5) | 10 | 2.4 (<3.0) | 20 |
| | TLMV3100G | 60 | Green | 564-577 | 6.0 (>2.5) | 10 | 2.4 (<3.0) | 20 |
| 2.5 mm x 5 mm 3-pin Symbol Package Bi-Color LEDs  | TLSV5100G | 50 | Green | 564-577 | 1.0 (>0.63) | 10 | 2.4 (<3.0) | 20 |
| | TLSV5100R | 50 | High-eff. Red | 635 | 1.0 (>0.63) | 10 | 2.0 (<3.0) | 20 |