

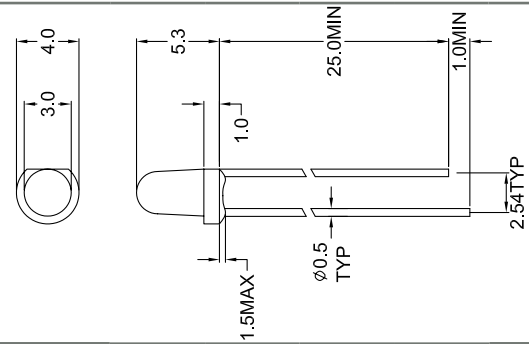
**Short Form Super Bright TH LEDs**

# OPTO ELECTRONIC COMPONENTS

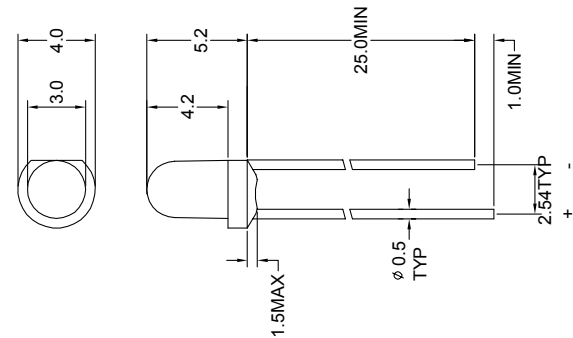


Greener  
and brighter

**SUPER BRIGHT LED**



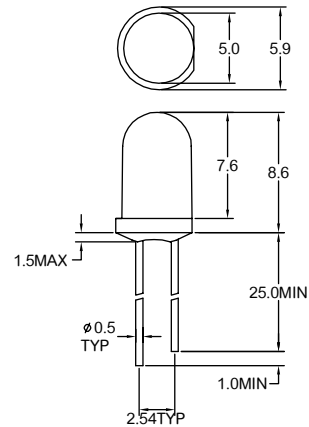
Part No	Chip			Lens color	Vf(V)@20mA		Iv(mcd)@20mA		Viewing angle 2Θ½
	Material	Emitted color	λD(nm) * λP(nm)		Min	Max	Min	Typ	
L8HRF12243	AlGaInP	Red	630	Water Clear	1.5	2.4	450	700	20
L8VG12243	GaP	Green	* 565	Water Clear	1.7	2.6	120	220	20
LHY12243	AlGaInP	Yellow	595	Water Clear	1.7	2.6	1100	2200	20
LUY12243	AlGaInP	Yellow	595	Water Clear	1.7	2.6	2700	5000	20



Part No	Chip			Lens color	Vf(V)@20mA		Vf(V)@20mA		Viewing angle 2Θ½
	Material	Emitted color	λD(nm) * λP(nm)		Min	Max	Min	Typ	
L8SR2040	GaAlAs	Red	660	Red Diffused	1.5	2.1	20	45	36
L8HRF2043	AlGaInP	Red	630	Water Clear	1.5	2.4	220	350	30
LURF2043	AlGaInP	Red	630	Water Clear	1.5	2.4	700	1100	30
L9UG20043	AlGaInP	Green	574	Water Clear	1.7	2.6	220	450	30
LHY2043	AlGaInP	Yellow	595	Water Clear	1.7	2.6	550	900	30
LUY2043	AlGaInP	Yellow	595	Water Clear	1.7	2.6	900	1500	30
LDGM2043	InGaN	True Green	525	Water Clear	2.8	4	1500	2700	30
LDUV2043	InGaN	Purple	* 400	Water Clear	3	4	90	160	30
LDBK2043	InGaN	Blue	470	Water Clear	2.8	4	900	1800	30
LWK2043	InGaN	White	X0.28 Y0.28	Water Clear	2.8	4	1800	3000	30

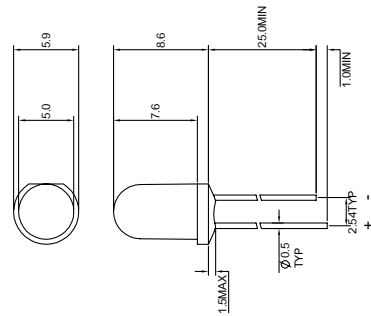
LED LAMP

**SUPER BRIGHT LED**

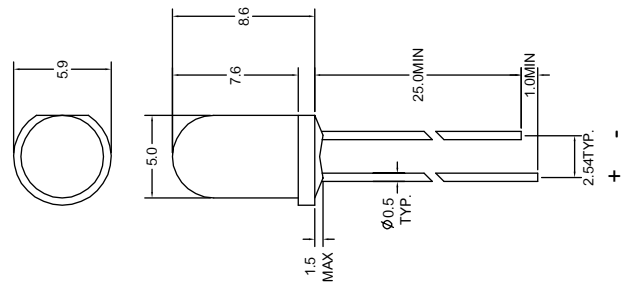


Part No	Chip			Lens color	Vf(V)@20mA		Iv(mcd)@20mA * @10mA		Viewing angle 2Θ <sub>1/2</sub>
	Material	Emitted color	λD(nm) * λP(nm)		Min	Max	Min	Typ	
L8SR3333	GaAlAs	Red	* 660	Water Clear	1.5	2.1	120	* 220	20
L8SRF3333	AlGaInP	Red	630	Water Clear	1.5	2.4	450	700	20
LHRF3333	AlGaInP	Red	630	Water Clear	1.5	2.4	1500	3400	20
LURF3333	AlGaInP	Red	630	Water Clear	1.5	2.4	1800	4000	20
LURF3333S	AlGaInP	Red	625	Water Clear	1.7	2.6	9500	11500	20
LUR3333H-B01	AlGaInP/Gap	Red	630	Water Clear	1.7	2.6	7700	11500	17
LSE3333	GaAsP/GaP	Orange	* 610	Water Clear	1.7	2.6	65	150	20
L8SEF3333	AlGaInP	Orange	605	Water Clear	1.7	2.6	1100	1800	20
LUE3333	AlGaInP	Orange	620	Water Clear	1.7	2.6	1800	3400	20
LUES3333	AlGaInP	Orange	615	Water Clear	1.7	2.6	4000	6200	20
L8UG3333	AlGaInP	Green	574	Water Clear	1.7	2.6	700	1100	20
LHY3333	AlGaInP	Yellow	595	Water Clear	1.7	2.6	1100	2200	20
LUY3333	AlGaInP	Yellow	595	Water Clear	1.7	2.6	2200	4000	20
LUY3333H	AlGaInP/Gap	Yellow	590	Water Clear	1.7	2.6	3400	6200	16
LDGM3333	InGaN	True Green	525	Water Clear	2.8	4	7700	14000	12
LDGL3333-B01	InGaN	Bluish Green	505	Water Clear	2.8	4	9500	11500	13
LDUV3333-B01	InGaN	Purple	400	Water Clear	3	4	350	450	20
LDBK3333	InGaN	Blue	470	Water Clear	2.8	4	2200	4000	13
LDBK3333-B01	InGaN	Blue	470	Water Clear	2.8	4	4000	9500	13
LDBK3333-B03	InGaN	Blue	470	Water Clear	2.8	4	7700	11500	13
LWK3333	InGaN	White	X0.28 Y0.28	Water Clear	2.8	4	7700	14000	16

**SUPER BRIGHT LED**

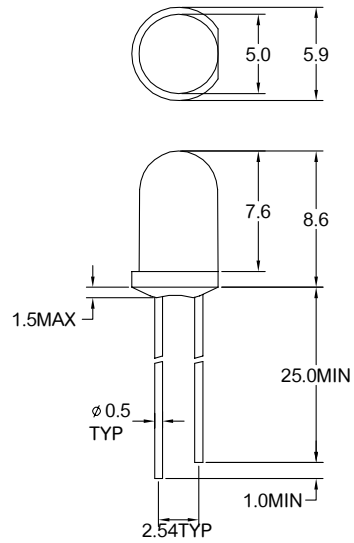


Part No	Chip			Water Clear	Vf(V)@20mA		Iv(mcd)@20mA		Viewing angle 2θ½
	Material	Emitted color	λD(nm) * λP(nm)		Min	Max	Min	Typ	
LUR3333/S46	GaAlAs	Red	* 660	Water Clear	1.5	2.4	1100	1800	30
LHRF3333/S46	GaAlAs	Red	630	Water Clear	1.5	2.4	900	1500	30
LURF3333/S46	AlGaInP	Red	630	Water Clear	1.5	2.4	1500	2700	30
LUR3333H/S46	AlGaInP/GaP	Red	630	Water Clear	1.7	2.6	2700	5000	30
LUE3333/S46	AlGaInP	Orange	620	Water Clear	1.7	2.6	1500	2700	30
L8UG3333/S46	AlGaInP	Green	574	Water Clear	1.7	2.6	550	900	30
LHY3333/S46	AlGaInP	Yellow	595	Water Clear	1.7	2.6	1100	1800	30
LUY3333/S46	AlGaInP	Yellow	595	Water Clear	1.7	2.6	1100	2200	30
LUY3333H/S46	AlGaInP/GaP	Yellow	590	Water Clear	1.7	2.6	2200	4000	30
LDBK3333/H0	InGaN	Blue	470	Water Clear	2.8	4	1500	2700	30



Part No	Chip			Water Clear	Vf(V)@20mA		Iv(mcd)@20mA		Viewing angle 2θ½
	Material	Emitted color	λD(nm) * λP(nm)		Min	Max	Min	Typ	
LSR3333/H0	GaAlAs	Red	* 660	Water Clear	1.5	2.4	160	300	38
LHR3333/H0	GaAlAs	Red	* 660	Water Clear	1.5	2.4	300	550	38
LUR3333/H0	GaAlAs	Red	* 660	Water Clear	1.5	2.4	900	1500	38
LURF3333/H0	AlGaInP	Red	630	Water Clear	1.5	2.4	1100	2200	38
LVG3333/H0	GapP	Green	* 565	Water Clear	1.7	2.6	160	300	38
L8UG3333/H0	AlGaInP	Green	574	Water Clear	1.7	2.6	350	700	38
LHY3333/H0	AlGaInP	Yellow	595	Water Clear	1.7	2.6	700	1500	38
LUY3333/H0	AlGaInP	Yellow	595	Water Clear	1.7	2.6	1100	1800	38

**SUPER BRIGHT LED**

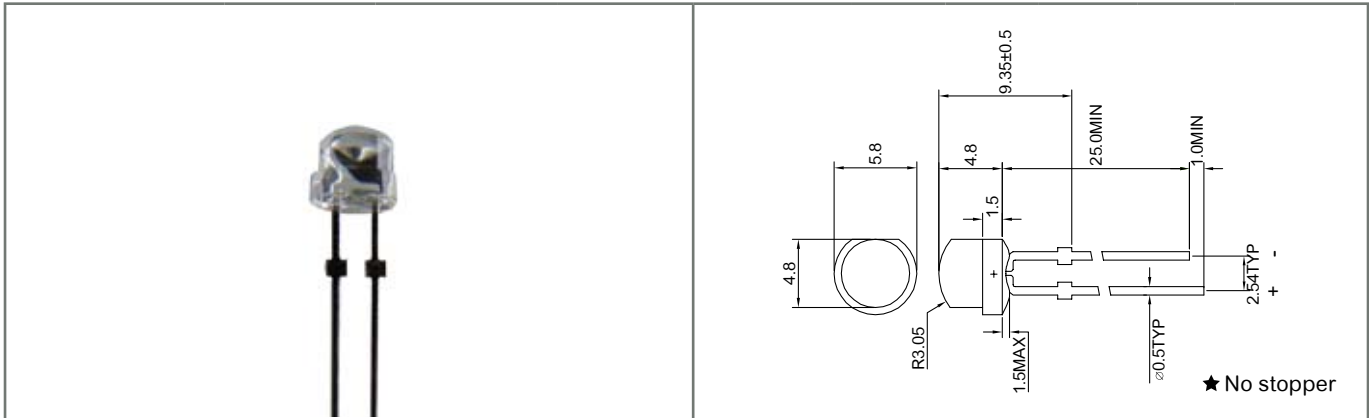


Part No	Chip			Lens color	Vf(V)@20mA		Iv(mcd)@20mA		Viewing angle 2θ½
	Material	Emitted color	λD(nm)		Min	Max	Min	Typ	
LHRF13743	AlGaInP	Red	630	Water Clear	1.5	2.4	220	350	56
LUR13743H	AlGaInP/GaP	Red	630	Water Clear	1.7	2.6	1500	2700	56
L9UG13743	AlGaInP	Green	574	Water Clear	1.7	2.6	120	220	56
LHY13743	AlGaInP	Yellow	595	Water Clear	1.7	2.6	300	450	56
LUY13743	AlGaInP	Yellow	595	Water Clear	1.7	2.6	900	1800	56
LDGM13743	InGaN	True Green	525	Water Clear	2.8	4	900	1500	44
LDBK13743	InGaN	Blue	470	Water Clear	2.8	4	1100	1800	42
LWK13743-60-CW	InGaN	White	X0.34 Y0.34	Water Clear	2.8	4	2200	4000	60

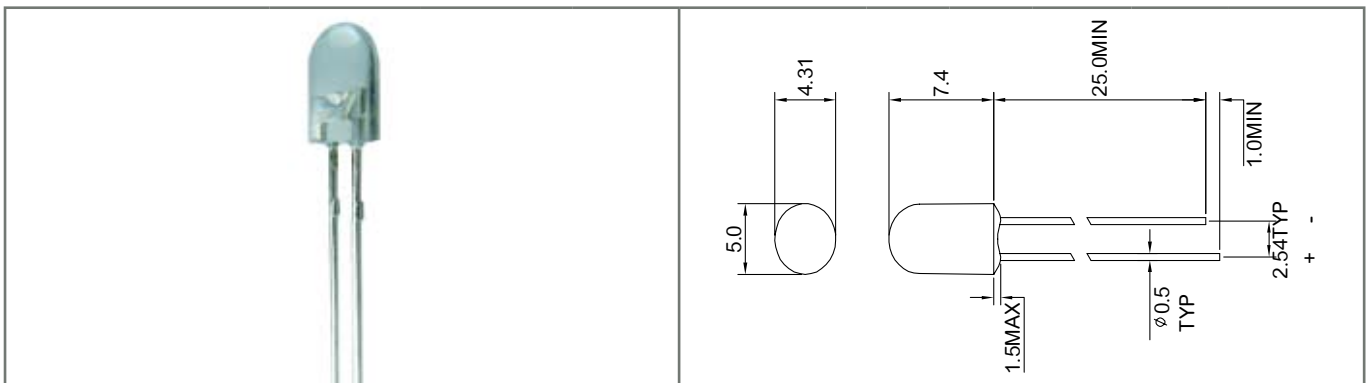
**LED LAMP**

**OVAL TYPE**

**LED LAMP**

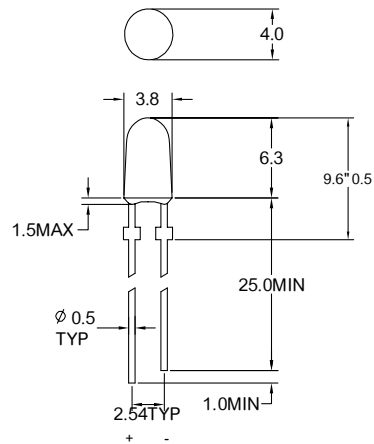


Part No	Chip			Lens color	Vf(V)@20mA		Iv(mcd)@20mA		Viewing angle 2θ <sub>1/2</sub>
	Material	Emitted color	Chromaticity Coordinates (Typ.)		Min	Max	Min	Typ	
LWK73133/P1	InGaN/GaN	White	X0.31 Y0.32	Water Clear	2.8	4.0	900	1500	120
★LWK73133/S3-WW	InGaN/GaN	Warm White	X0.42 Y0.40	Water Clear	2.8	4.0	900	1500	120
★LWK73143Z-A01	InGaN/GaN	White	X0.32 Y0.33	Water Clear	2.8	4.0	1500	2000	100

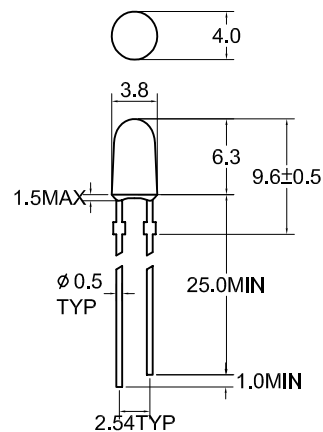


Part No	Chip			Lens color	Vf(V)@20mA		Iv(mcd)@20mA		Viewing angle 2θ <sub>1/2</sub>
	Material	Emitted color	λD(nm)		Min	Max	Min	Typ	
LHRF13433	AlGaInP	Red	630	Water Clear	1.5	2.4	1500	3400	V20° /H40°
LURF13433	AlGaInP	Red	630	Water Clear	1.5	2.4	900	1800	V18° /H34°
LUR13430H/S19-PF-B01	AlGaInP/GaP	Red	630	Red Diffused	1.7	2.6	1100	1800	V36° /H62°
L9SEF13430-S12	AlGaInP	Orange	605	Orange Diffused	1.7	2.6	350	550	V36° /H62°
L8UG13433	AlGaInP	Green	574	Water Clear	1.7	2.6	450	700	V18° /H24°
LHY13433	AlGaInP	Yellow	595	Water Clear	1.7	2.6	1100	1800	V18° /H34°
LUY13433	AlGaInP	Yellow	595	Water Clear	1.7	2.6	1500	2700	V18° /H34°
LUY13430H/S16-PF-B01	AlGaInP/GaP	Yellow	590	Yellow Diffused	1.7	2.6	1200	1800	V36° /H62°
LDGM13430/S13-B01	InGaN	True Green	525	Green Diffused	2.8	4	1100	2200	V14° /H18°
LDBK13433	InGaN	Blue	470	Water Clear	2.8	4	3400	6200	V18° /H30°

**SUPER BRIGHT LED**



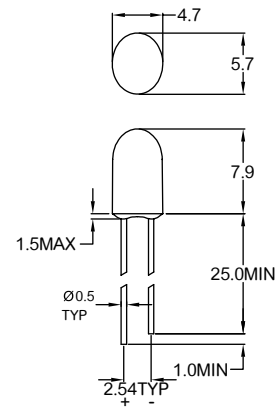
Part No	Chip			Lens color	Vf(V)@20mA		Iv(mcd)@20mA		Viewing angle 2θ <sub>1/2</sub>
	Material	Emitted color	λD(nm)		Min	Max	Min	Typ	
LHRF22840/S8	AlGaInP	Red	630	Red Diffused	1.5	2.4	120	250	V120° /H80°
L9UG22840/S8	AlGaInP	Green	574	Green Diffused	1.7	2.6	50	90	V120° /H80°
LHY22840R/S8	AlGaInP	Yellow	595	Yellow Diffused	1.7	2.6	120	200	V120° /H80°
LDGM22840/S8	InGaN	True Green	525	Green Diffused	2.8	4	700	1300	V86° /H58°



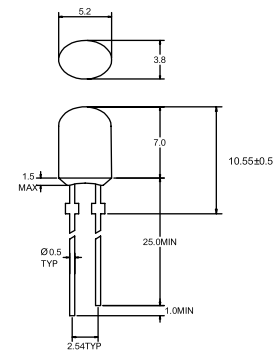
Part No	Chip			Lens color	Vf(V)@20mA		Iv(mcd)@20mA		Viewing angle 2θ <sub>1/2</sub>
	Material	Emitted color	λD(nm)		Min	Max	Min	Typ	
LURF22841/S1	AlGaInP	Red	630	Red Transparent	1.5	2.4	90	160	V120°/H78°
LDGM22841/S1	InGaN	Green	525	Green Transparent	2.8	4.0	450	700	V100°/H54°
LDBK22841/S1	InGaN	Blue	470	Blue Transparent	2.8	4.0	50	90	V80°/H42°

LED LAMP

OVAL TYPE



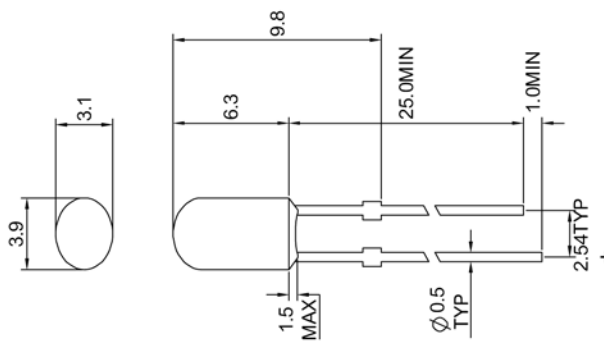
Part No	Chip			Lens color	Vf(V)@20mA		IV(mcd)@20mA		Viewing angle 2θ <sub>1/2</sub>
	Material	Emitted color	λD(nm)		Min	Max	Min	Typ	
LURF23531/P1	AlGaInP	Red	630	Red Transparent	1.5	2.4	450	700	V62°/H28°
LHRF23533	AlGaInP	Red	630	Water Clear	1.5	2.4	350	550	V62°/H28°
LUR23533H	AlGaInP/GaP	Red	630	Water Clear	1.7	2.6	2700	5000	V60°/H30°
LUE23533	AlGaInP	Orange	620	Water Clear	1.7	2.6	1100	1900	V62°/H28°
L9UG23531/P1	AlGaInP	Green	574	Green Transparent	1.7	2.6	300	450	V62°/H28°
LUG23533	AlGaInP	Green	574	Water Clear	1.7	2.6	350	700	V62°/H28°
LUY23533	AlGaInP	Yellow	595	Water Clear	1.7	2.6	700	1500	V62°/H28°
LUY23531H/P1	AlGaInP/GaP	Yellow	590	Yellow Transparent	1.7	2.6	1100	2200	V74°/H38°
LUYS23533	AlGaInP	Yellow	587	Water Clear	1.7	2.6	700	1500	V62°/H28°
LDGM23533/P1	InGaN	Green	525	Water Clear	2.8	4	4000	7700	V30°/H20°
LDBK23533	InGaN	Blue	470	Water Clear	2.8	4	900	1800	V46°/H20°



Part No	Chip			Lens color	Vf(V)@20mA		IV(mcd)@20mA		Viewing angle 2θ <sub>1/2</sub>
	Material	Emitted color	λD(nm)		Min	Max	Min	Typ	
LURF43740/S2	AlGaInP	Red	630	Red Diffused	1.5	2.4	450	700	V40°/H110°
LUR43740H/P1	AlGaInP/GaP	Red	630	Red Diffused	1.7	2.6	700	1100	V40°/H110°
LUY43740-S2	AlGaInP	Yellow	595	Yellow Diffused	1.7	2.6	550	1100	V40°/H110°
LDGM43740/S2	InGaN	True Green	525	Green Diffused	2.8	4	1100	1500	V32°/H90°
LDBK43740/P1	InGaN	Blue	470	Blue Diffused	2.8	4	350	550	V40°/H110°



OVAL TYPE



Part No	Chip			Lens color	Vf(V)@20mA		Iv(mcd)@20mA		Viewing angle 2Θ½
	Material	Emitted color	λD(nm)		Min	Max	Min	Typ	
LURF32840/S4	AlGaInP	Red	630	Red Diffused	1.5	2.4	350	600	V74°/H110°
LUR32840H/S4	AlGaInP/GaP	Red	630	Red Diffused	1.7	2.6	700	1100	V74°/H110°
LDGM32840/S4	InGaN	True Green	525	Green Diffused	2.8	4.0	900	1500	V60°/H110°
LDBK32840/S4	InGaN	Blue	470	Blue Diffused	2.8	4	350	550	V60°/H100°

LED LAMP