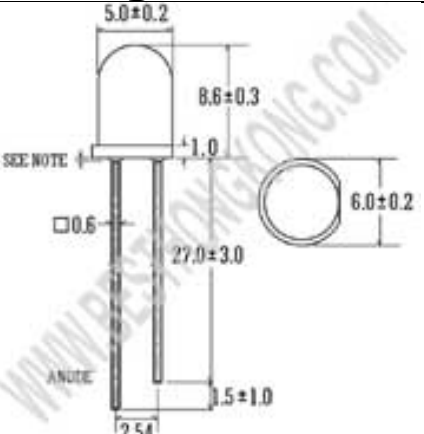
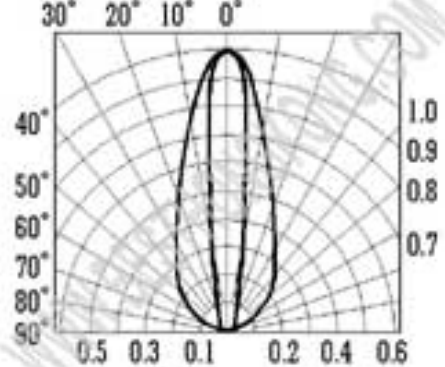


333 T1 3/4(5mm) ULTRA BRIGHT SERIES ROUND LED LAMPS

Package Dimension 	Radiation Diagram  <p>Viewing Angle - 2Φ 1/2 : 20°± 10°</p>	Features <ul style="list-style-type: none"> ✓ Standard T1 3/4 5mm LED ✓ Low Power Consumption ✓ Longer Life Time ✓ I.C. Compatible Absolute Maximum Ratings (Ta=25°C) <table border="1"> <thead> <tr> <th>Item</th> <th>Symbol</th> <th>Maximum</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>Reverse Voltage</td> <td>V_R</td> <td>5</td> <td>V</td> </tr> <tr> <td>Reverse Current</td> <td>I_R</td> <td>100</td> <td>μA</td> </tr> <tr> <td>Operating Temperature</td> <td>T_{OPR}</td> <td>-40 ~ +85</td> <td>°C</td> </tr> <tr> <td>Storage Temperature</td> <td>T_{STG}</td> <td>-40 ~ +100</td> <td>°C</td> </tr> <tr> <td>Soldering Temperature</td> <td>T_{SPR}</td> <td>260°C for 5sec</td> <td>°C</td> </tr> </tbody> </table> Electro-Optical Characteristics (Ta=25°C) <table border="1"> <thead> <tr> <th>Item</th> <th>Symbol</th> <th>Condition</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>Spectral line half-width</td> <td>Δλ</td> <td>I_F = 20mA</td> <td>nm</td> </tr> <tr> <td>Power dissipation</td> <td>P_D</td> <td>I_F = 20mA</td> <td>mW</td> </tr> <tr> <td>Peak forward current(Duty 1/10, @KHz)</td> <td>I_{FP}</td> <td>I_F = 20mA</td> <td>mA</td> </tr> </tbody> </table>	Item	Symbol	Maximum	Unit	Reverse Voltage	V _R	5	V	Reverse Current	I _R	100	μA	Operating Temperature	T _{OPR}	-40 ~ +85	°C	Storage Temperature	T _{STG}	-40 ~ +100	°C	Soldering Temperature	T _{SPR}	260°C for 5sec	°C	Item	Symbol	Condition	Unit	Spectral line half-width	Δλ	I _F = 20mA	nm	Power dissipation	P _D	I _F = 20mA	mW	Peak forward current(Duty 1/10, @KHz)	I _{FP}	I _F = 20mA	mA
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PARTS SELECTION GUIDE AND APPLICATION INFORMATION (Ta=25°C)

Part No	LED Chip			Lens Color	Absolute Maximum Ratings				Electro-Optical Characteristics						Viewing Angle 2Φ1/2	
	Material	Emitted Color	λp (nm)		Δλ (nm)	P _D (mW)	I _F (mA)	I _F (Peak)	V _F (V)			I _v (mcd) @I _F =20mA				
									Min	Typ	Max	Ranks	Min	Typ		Max
BUBC333	InGaN/GaN/SiC	Ultra Blue	470	Water Clear	30	100	30	100	2.8	3.5	4.0	BA04-BA08	1000	-	6000	20
BUTGC333	InGaN/GaN/SiC	Ultra Traffic Green	505	Water Clear	30	100	30	100	2.8	3.5	4.0	BA07-BA12	3000	-	15000	20
BUPGC333	InGaN/GaN/SiC	Ultra Pure Green	525	Water Clear	30	100	30	100	2.8	3.5	4.0	BA07-BA12	3000	-	15000	20
BUWC333	InGaN/GaN/SiC	Ultra White	-	Water Clear	30	100	30	100	2.8	3.5	4.0	BA04-BA12	1000	-	15000	20
BUWLC333	InGaN/GaN/SiC	Ultra Pure White	-	Water Clear	30	100	30	100	2.8	3.5	4.0	BA04-BA09	1000	-	8000	20
BUPCC333	InGaN/GaN/SiC	Ultra Pink	-	Water Clear	30	100	30	100	2.8	3.5	4.0	BA04-BA09	1000	-	8000	20
BURLC333	AlInGaP/AlGaInP	Ultra Red Orange	630	Water Clear	20	100	30	100	1.9	2.1	2.5	BA04-BA12	1000	-	12000	20
BUYC333	AlGaInP	Ultra Yellow	590	Water Clear	20	100	30	100	1.9	2.1	2.5	BA04-BA12	1000	-	12000	20
BUAC333	AlGaInP	Ultra Amber	605	Water Clear	20	100	30	100	1.9	2.1	2.5	BA04-BA08	1000	-	6000	20
BUOC333	AlGaInP	Ultra Orange	618	Water Clear	20	100	30	100	1.9	2.1	2.5	BA04-BA08	1000	-	6000	20
BUVC333	-	Ultra Violet	420	Water Clear	20	100	30	100	2.8	3.5	4.0	BA00	10	-	300	20

Notes:

- All dimensions are in millimeters.
- Clean only in isopropanol, ethanol, Freon TF (or equivalent).
- If forming is required, it must be done before soldering. Form pin leads by securing under 5mm from body and bedding with radio pliers or the equivalent to avoid pressure on resin. When the LED is mounted into a P.C. board, pitch spacing should be aligned to prevent any stress to the resin. Any unsuitable stress applied to resin may break bonding wire in LED, which will cause failure.
- Protruded resin under flange is 1.5mm Max.
- Specifications are subject to change without notice.

Date: 2004-1-1@Hong Kong

Version: V1.0