

Datasheet no.47 POLYWA POWER LEDs KLHP3433XE

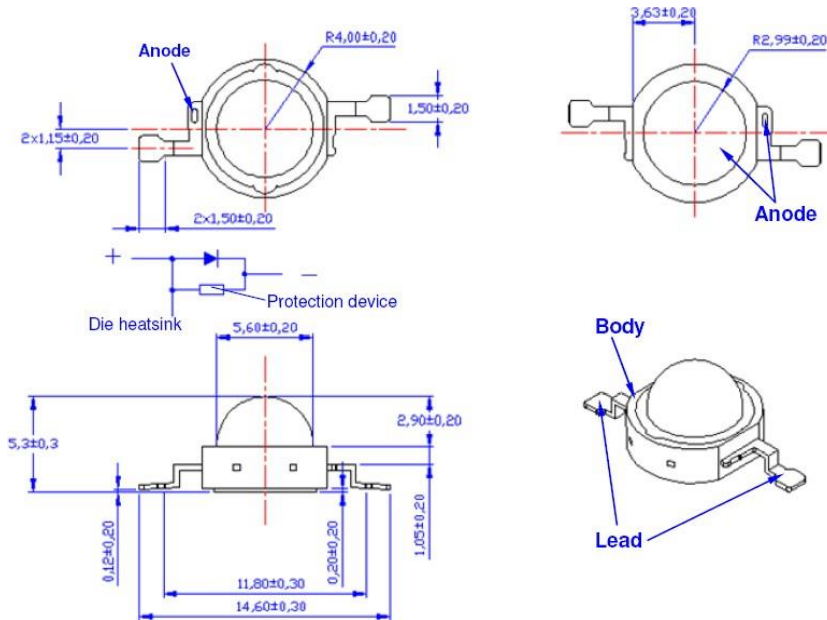
KLHP3433XE POLYWA Power LED EMITTER is an excellent high power LED for **Solid State Lighting** applications. This emitter (with Star MPCB option) with **silicone lens** technology provides the good life and can be **reflow soldered** at 260°C. The ULTRA LOW DECAY in light output is less than 10% at severe stress conditions (700mA, 85°C, 85%RH) proves high reliability.

With special **phosphor** technology, warm white KLHP3433WWE has very good color stability in high temperature. The typical CCT change is less than 50K when junction temperature achieves 100°C.

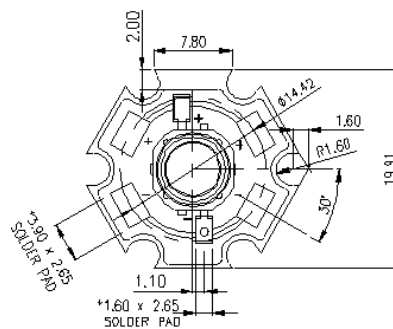


KLHP3433XE has special design to fit second optics. The user can easily get the uniform light with any secondary optics.

1. MECHANICAL DIMENSIONS



Star with MPCB

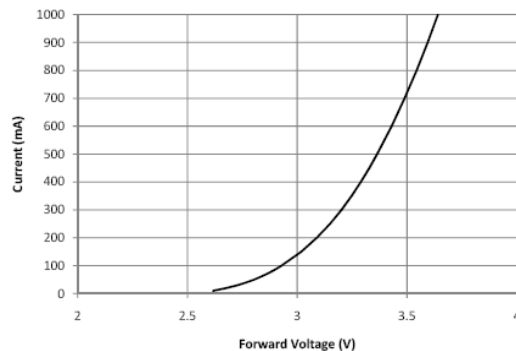


2. Absolute Ratings

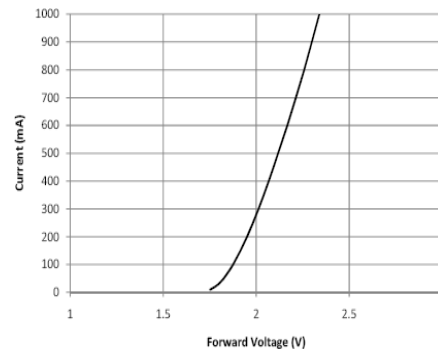
Parameter	Rating
	White Series / Royal Blue / Blue / Green / Amber / Red
Typical DC Forward Current (mA)	350~700 mA
LED Junction Temperature	125°C
LED Operating Temperature	-40°C~110°C
Storage Temperature	-40°C~110°C
Soldering Temperature	Max. 260°C / Max. 10sec. (JEDEC 020c)
ESD Sensitivity	2,000 V HBM (JESD-22A-114-B)
Reverse Voltage	Not design to be driven in reverse bias (VR≤5V)
Preconditioning	Acc. to JEDEC Level 2

2. Typical Forward I-V Characteristics

2.1 White Series/Green / Blue / Royal Blue



2.2 Amber / Red



3. General Characteristics

3.1 Luminous Flux and Forward Voltage at 350mA and 700mA

Part Number	colour	Luminous Flux(lm) Or Radiometric power *(mW) @350mA		Luminous Flux(lm) Or Radiometric power *(mW) @700mA		Forward voltage Vf(v) @350mA	Forward voltage Vf(v) @700mA	Typ. CRI	CCT/λp	2θ1/2
		Min lumen	Typ lumen	Min lumen	Typ lumen					
KLHP3433W	W	110-120	130-140	240	260-280	2.8-3.8	3.0-4.1	70	4750K-7000K	135
KLHP3433NW	NW	70	80	119	136	2.8-3.8	3.0-4.1	75	3700K-4750K	130
KLHP3433WW	WW	50	60	85	120	2.8-3.8	3.0-4.1	80	2600K-2700K	125
KLHP3433R	Red	35	45	65	83	2.0-3.4	2.2-3.7	-	620-635	145
KLHP3433A	Amber	35	45	61	79	2.0-3.4	2.2-3.7	-	580-600	145
KLHP3433G	Green	45	60	74	99	2.8-3.8	3.0-4.1	-	520-535	150
KLHP3433B	Blue	10	18	17	31	2.8-3.8	3.0-4.1	-	460-470	140

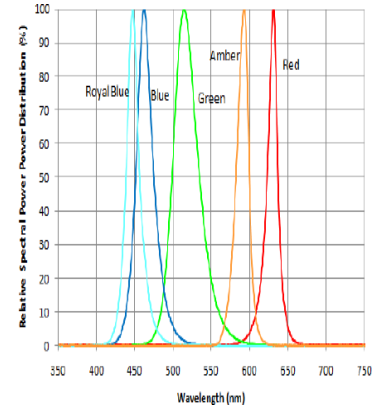
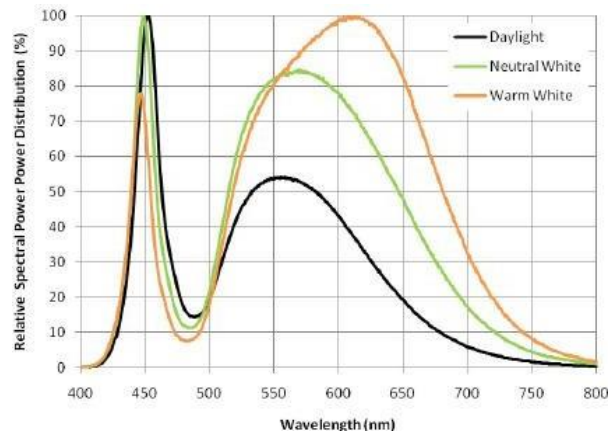
Temperature coefficient of Vf : -3 mV/°C W,G,B,-2 mV/°C

Thermal Resistance Junction to LED case: 10°C/W

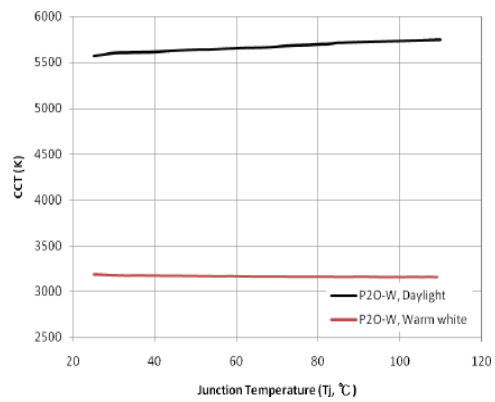
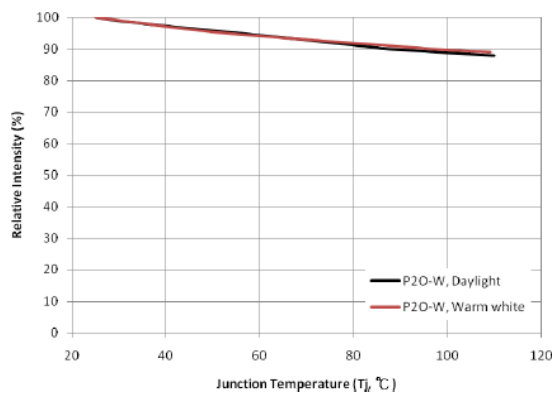
Note:

1. Luminous flux is measured with an accuracy of ±10%
2. the CCT colour correlated color temperature is measured with an accuracy of ±200K
3. The peak/dominant wavelength is measured with an accuracy of ±1nm
4. The forward voltage is measured with an accuracy of ±0.1V

5. Spectral Characteristics of White LEDs & other Colors

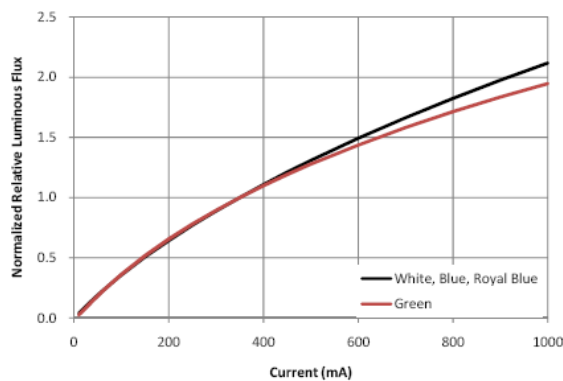


5. Light output Characteristics over Temperature



6. Typical Forward I-V Characteristics

6.1 White Series/Green / Blue / Royal Blue



6.2 Amber / Red

