

LHP-5050-5000-3

Specification

HiPower LED 0,5W, daylight-white, 5000K($\pm 10\%$)
Rev. 1.2 (October 2016)

Features

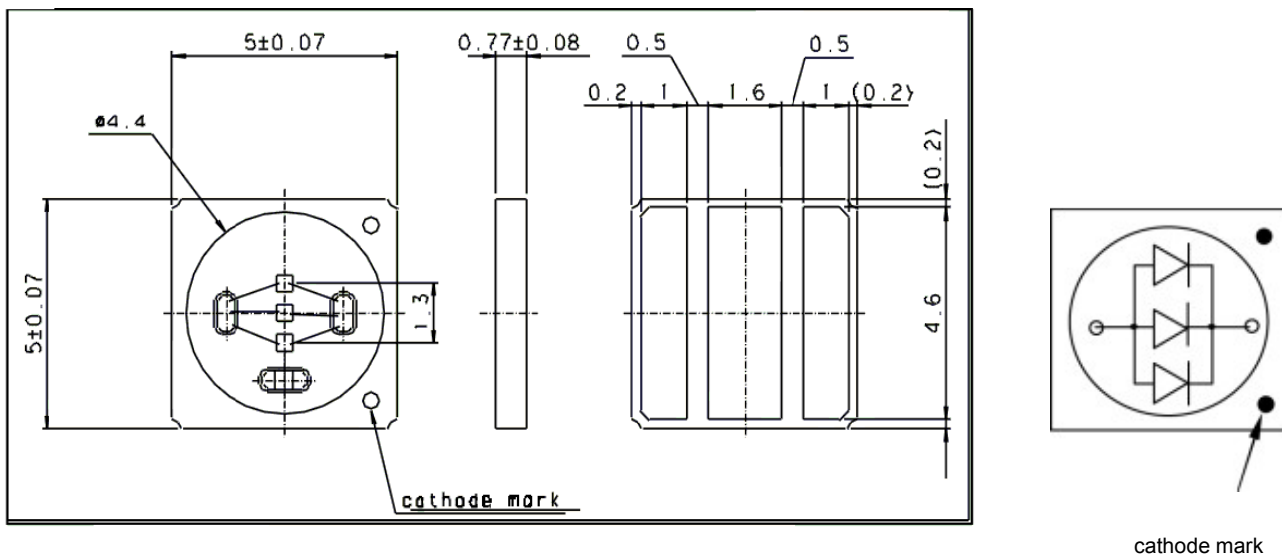
- ✓ CRI Ra 98 (typ.)
- ✓ emitted spectrum 390nm – 730nm
- ✓ 15,47lm (typ.)
- ✓ 120° viewing angle
- ✓ operating temperature range -40 to 85°C
- ✓ RoHS-compliant



Application

- microscope
- spectroscopy
- human vision inspection
- medical lighting

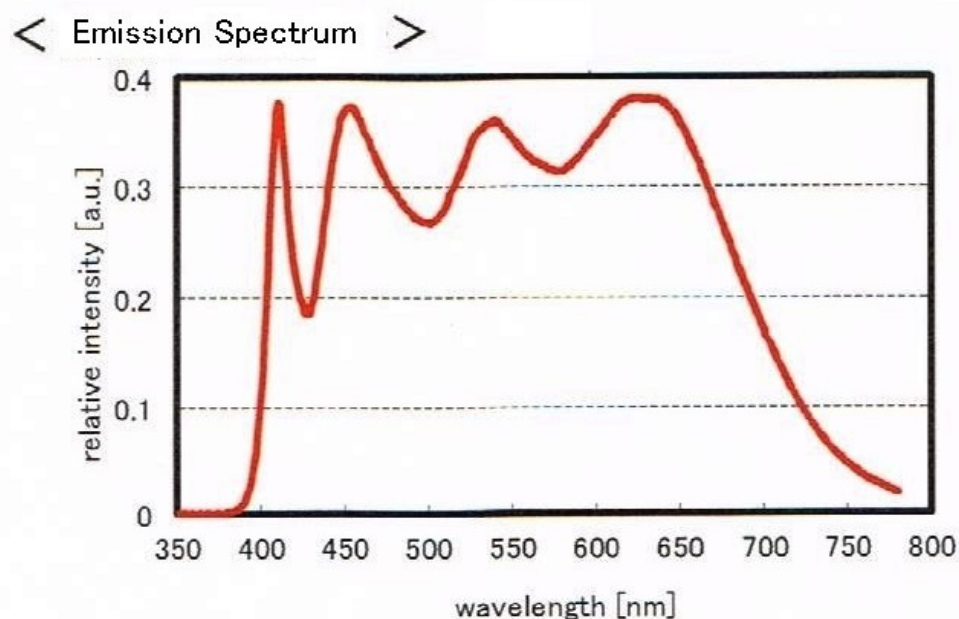
Dimensions



Specification

LHP-5050-5000-3	
Outline Dimension	5mm * 5mm * 0,77mm
Active Area	d = 4mm
Power (P)	0,5W
Forward Voltage (Vf)	2,9V – 3,7V
Reverse Voltage	5V
Continuous Forward Current (IF)	180mA
Thermal Resistance	61°C/W
Junction Temperature max.	90°C
Chip Quantity	3 pcs
Operating Temperature Range	-40°C - 85°C
Luminous Flux (IF=60mA)	11,5lm (min.) , 15,47lm (typ.)
Color Rendering Index	Ra98 (typically)
CCT (IF=60mA)	4500K ~ 5500K (5000K typically)
Blue peak (IF=60mA)	405nm (min.), 408nm (typ.)
Total Viewing Angle	120°

Spectrum diagram



Color Rendering

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15*
97	99	99	98	98	98	99	98	97	99	97	96	97	98	98

* available in JIS only

Ri	Munsell Hue Value / Chromaticity	Appearance color under daylight
R1	7.5R 6/4	light greyish red
R2	5Y 6/4	dark greyish yellow
R3	5GY 6/8	strong yellow green
R4	2.5G 6/6	moderate yellowish green
R5	10GB 6/4	light bluish green
R6	5PB 6/8	light blue
R7	2.5P 6/8	light violet
R8	10P 6/8	light reddish purple
R9	4.5R 4/13	strong red
R10	5Y 8/10	strong yellow
R11	4.5G 5/8	strong green
R12	3PB 3/11	strong blue
R13	5YR 8/4	light yellowish pink
R14	5GY 4/4	moderate olive green
R15	1YR 6/4	japanese complexion

Electrical and optical characteristics

Fig.1: Angle diagram

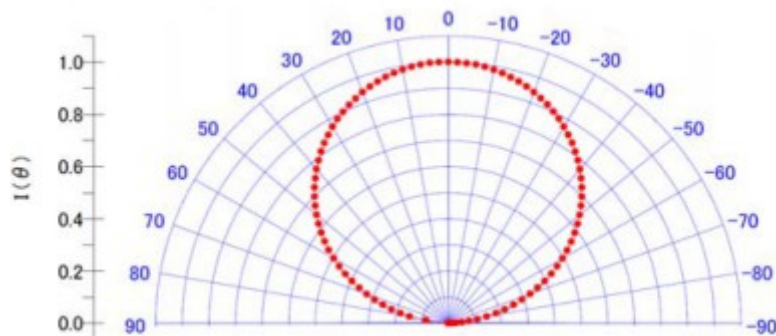
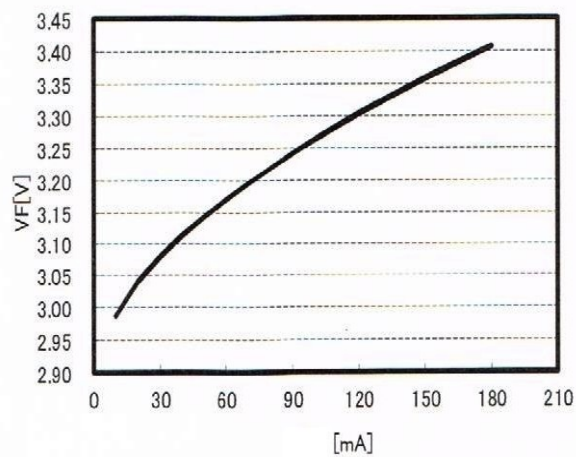
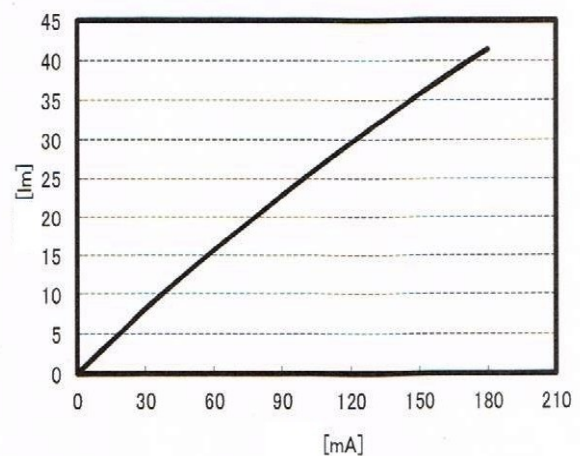


Fig.2: other diagram

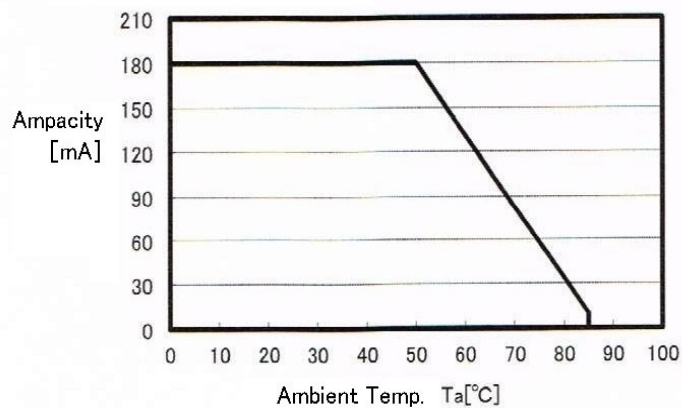
< I-V Characteristics >



< I-P Characteristics >



< Ampacity - Ambient Temp. >



Handling precaution



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