

LHP-R1750-5000-4-8

Description

HiPower scientific LED on round PCB
8.1W, daylight-white, 5000K(typ.)
designed for VIS-spectrometry applications
Rev. 0.9 (Apr. 2024)

Features

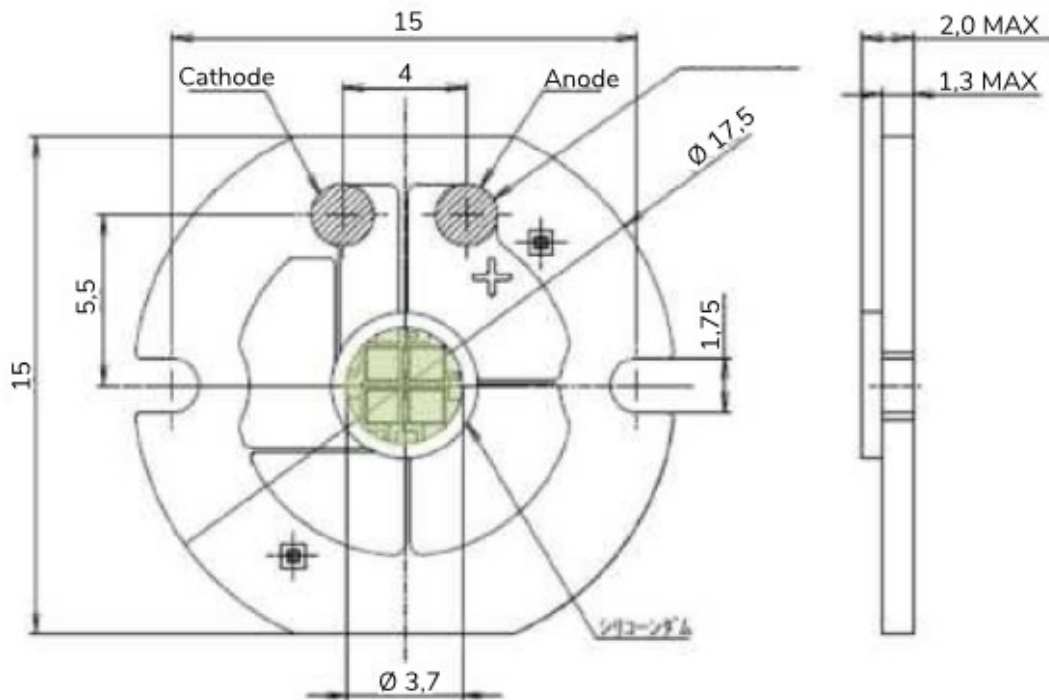
- ✓ emitted spectrum 390nm ~ 790nm
- ✓ Po 1300mW @ 600mA(typ.)
- ✓ 120° viewing angle
- ✓ operating temperature range -20°C ~ 85°C
- ✓ RoHS-compliant
- ✓ lifespan 30.000 hours



Application

- spectrophotometer
- blood analyzing
- microscope lighting
- color-testing

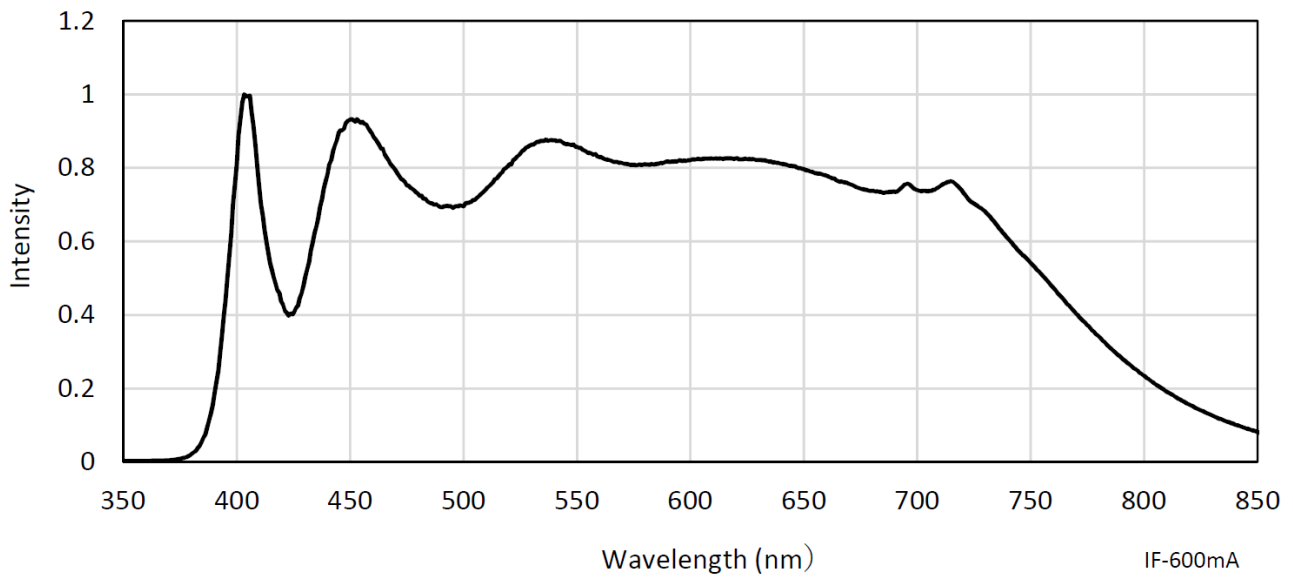
Dimensions



Specification

LHP-R1750-5000-4-8	
Outline Dimensions	d= 17.5mm t= 2mm
Active Area (LES)	d = 4mm
Power (P_D)	8,1 W
Forward Voltage (V_F)	12,0V ~ 16,0V, typ. 13,6V
Reverse Voltage	5V
Forward Current (I_F)	600mA
Thermal Resistance	2,5°C/W
Chip Quantity	4 pcs
Lifespan	30.000h
Operating Temperature Range	-20°C - 85°C
Radiant Flux	1300mW
Color Rendering Index	Ra98 (typically)
Total Viewing Angle	120°

Spectrum



Color Rendering

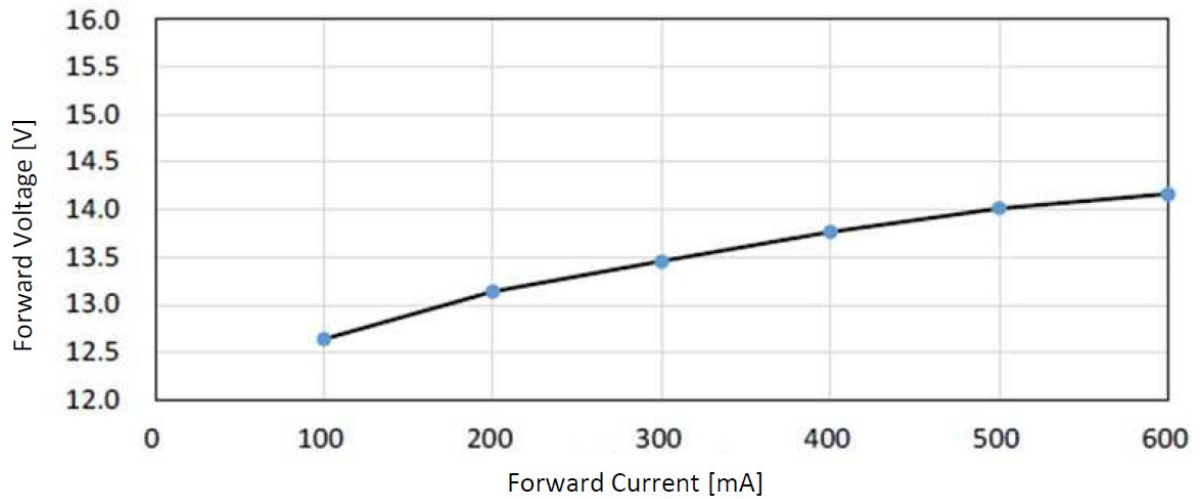
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15*
97	99	99	98	98	98	99	98	97	99	97	96	97	98	98

* available in JIS only

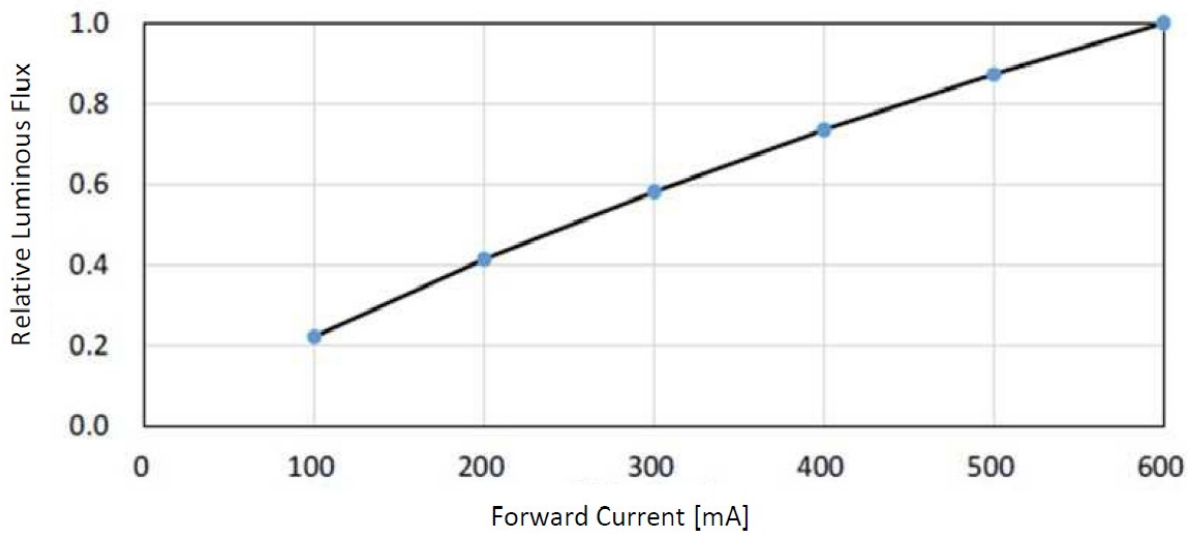
Ri	Munsell Hue Value / Chromaticity	Appearance color under daylight
R1	7.5R 6/4	light greyish red
R2	5Y 6/4	dark greyish yellow
R3	5GY 6/8	strong yellow green
R4	2.5G 6/6	moderate yellowish green
R5	10GB 6/4	light bluish green
R6	5PB 6/8	light blue
R7	2.5P 6/8	light violet
R8	10P 6/8	light reddish purple
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

< Forward Current vs Forward Voltage >



< Forward Current vs Relative Luminous Flux >



Handling precaution



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