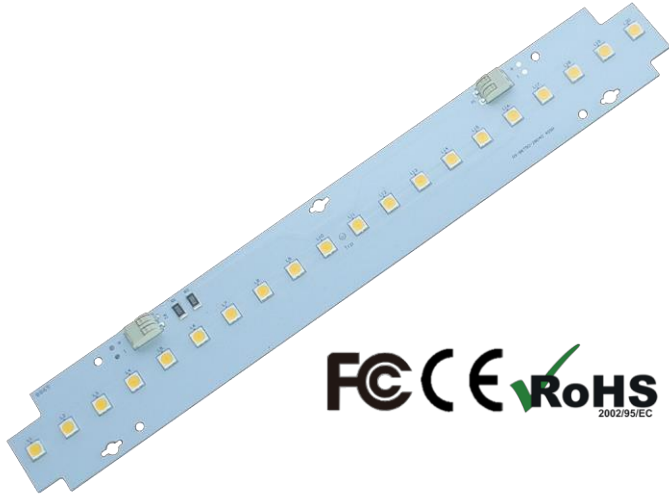


Description:

RX-BKT50-28040, High Power LED module – Max power 15W; Ideal for linear and panel lights. 2060 Terminal Block, very easy to connect and remove the conductors. Perfectly uniform light, even if several LED modules are used together in a line. LED Line systems are designed to produce pure white light for general lighting applications with high efficiency level, surpassing T5. For a variety of lighting.



CRI: > 80

3000K/4000K/6000K

Efficiency 118Lm/W

8.5W@0.7A / 1010Lm

15W@1.2A / 1580Lm

Size

280x40mm 20 LEDs

High Power

15W 12.5V@1200mA

Warranty

3 years

High power low price

High performance-price ratio

Application specs

LED module Brightness 1010Lm @8.5W ; 1580Lm @15W

Default Colors CW6000~6500K

Other colors WW2800~3200K NW3800~4250K

Waterproof Rating No IP rating

Operating Temperature -40~85°C PCB /T_{cp}

Electrical specs

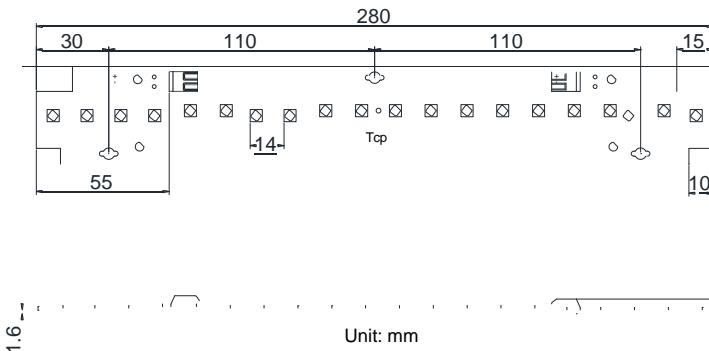
Power 8.5W @0.7A; 15W@1.2A

Input DC12.2V@0.7A ; DC12.8V@1.2A

Interconnect connection --

Certification CE RoHS FCC

Life-Span >50000hours T_c<70 °C, I<1.2A



Technical Data:

Part Number	Dimensions Net weight	LED QTY	Test Current	Forward VoltageTyp	Luminou s flux Typ	Power Typ	Efficacy Typ	Stitching qty* Max Parallel	T _{cp} Test
RX-BKT50-28040	280x40mm 50g	4s 5p 20pcs	0.35A	11.4V	518Lm	4W	129Lm/W	8pcs	38°C
			0.7A	12.2V	1010Lm	8.5W	118Lm/w	4pcs	45°C
			1.2A	12.8V	1580Lm	15W	105Lm/w	2pcs	53°C
			1.5A	13.2V	1860Lm	19.8W	94Lm/W	2pcs	58°C

Note: Beam characteristic120 °, Tolerance range for optical data: ±10 %. Tolerance range for electrical data ±5 %

The above table data testing at room temperature is 25 °C, Cooling by free air convection. LED color temperature 6000-6500K, CRI 85,

* Stitching qty: Number of Parallel Connection of. If the serial connection, the drive voltage and current. Example 3

Maximum Rated Values

Part Number	Forward Current	Forward Voltage
RX-BKT50-28040	1.5A	13.2V@1.5A
--		

Thermal Characteristics / Thermal Management

Operating Temperature, T _{cp}	-40 ~ +65°C
Max. Solder Point Temp., T _{cp}	85°C
T _{c_life} T _{cp} =65°C	50,000 @ 1500mA (L70B50)

Standard Driver Options 100% No flicker

	Low brightness	High brightness
EFV-018-W12 Constant Voltage	1S 12V@600mA 890Lm AC 9W PF0.6	--
EFC-022-600mA	3S 35.5V@600mA 2530Lm AC 23W PF0.9	--
HLG-40-12A	5P 12.1V@660mA x5 4710Lm AC 44W PF0.9	3P 12.6V@1.1A x3 4490Lm AC 46W PF0.9
HLG-120-48A	4Sx4P 48.2V@625mA x4 14400Lm AC 135W PF0.9	4Sx2P 51.5V@1.25A x2 13100Lm AC 140W PF0.9

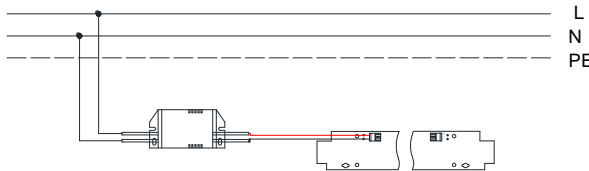
Part Numbering

RX-BKT	-50	-XXXX	-XX
LED Model	LED Model	PCB Size	Photometric Code
			CW6000~6500K
			NW3800~4250K
			WW2800~3200K

Where 3S = 3 Serial Connection, 3P is 3 Module in Parallel Connection etc; Power includes drivers consumption

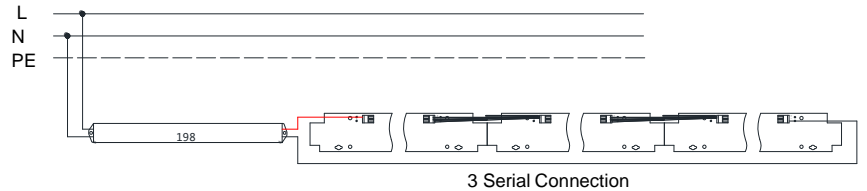
Where 4Sx4P = 3 Serial Connection X 4 Parallel Connection, Total 16pcs LED module.

For 3 example:



LED drivers EFV-018-W12 1S About 0.6A
[12V@0.6A](#) 7.2W 890Lm AC Power 9W PF0.6

Large margin design, even if the constant voltage power supply may also work. Please note that the constant power driver must leave enough margin. (Derating)



LED drivers EFC-022 for 2S x600mA [35.5V@0.6A](#) 21.3W 2530Lm
AC Power About : 23W PF 0.9



Serial Connection

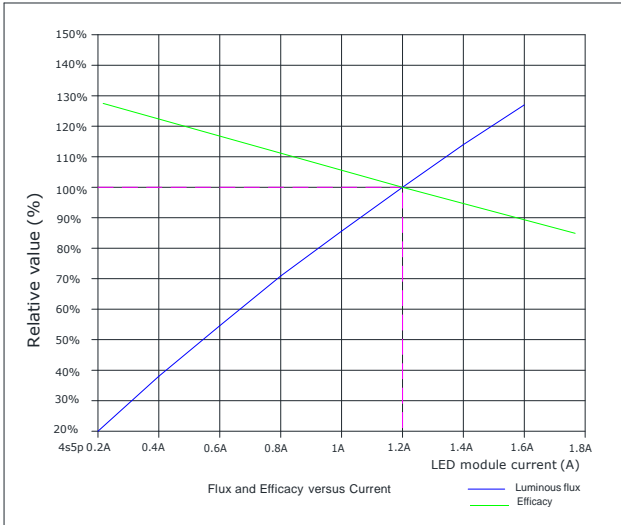


Parallel Connection

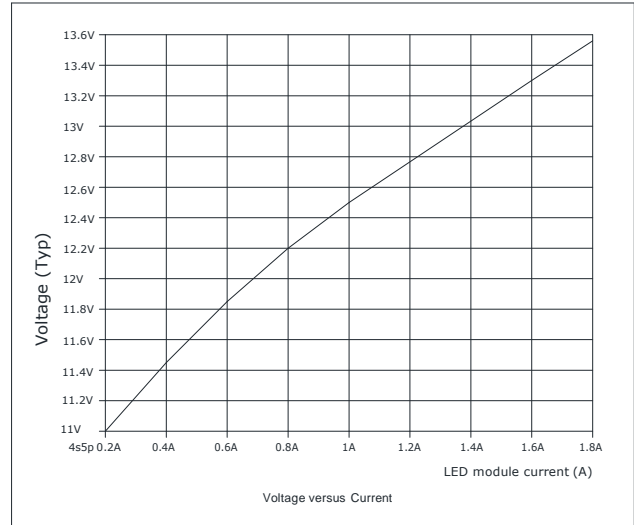


HLG-120-48A for 4S x 2P =8pcs LED module
4S=51.5V @ 1.25A 64W X 2P =128W 13100Lm
AC Power 140W PF0.9

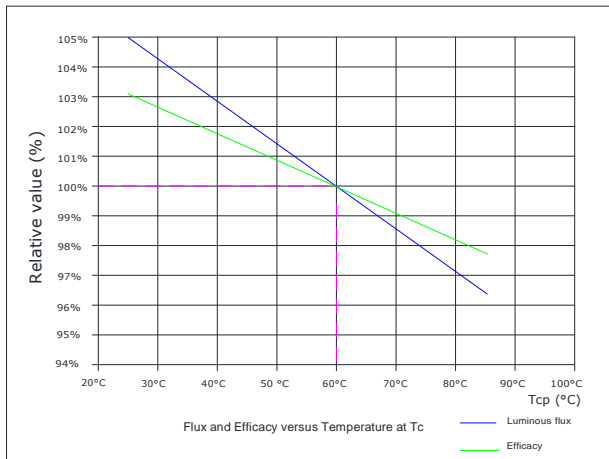
Flux and Efficacy versus Current



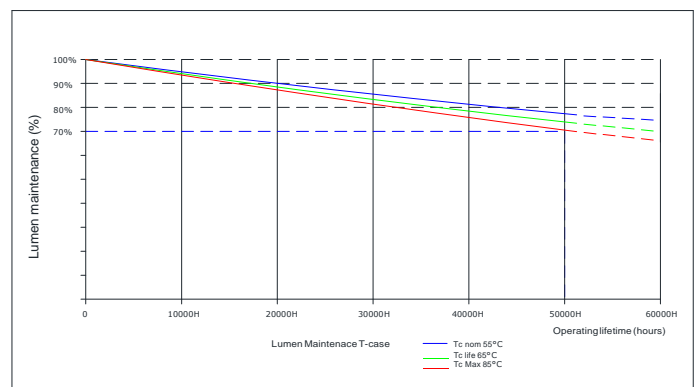
Voltage versus Current



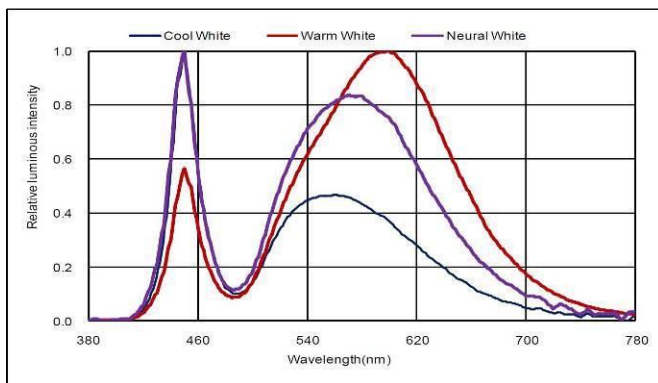
Flux and Efficacy versus Temperature at Tc



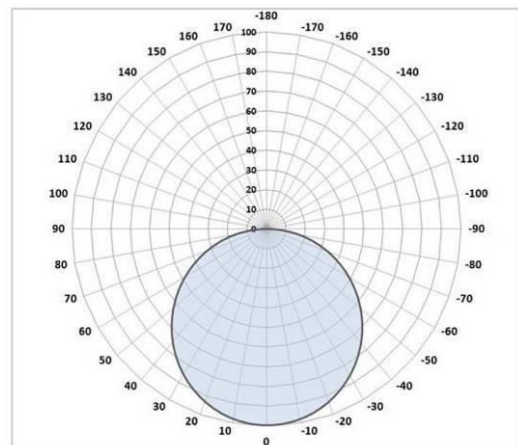
Lumen Maintenance T-case



Relative spectral emission



Light distribution 12.2V 0.7A



Mounting instruction

None of the components of the module (substrate, LED, electronic components etc.) may be exposed to tensile or compressive stresses.

Max. torque for fixing: 0.5 Nm.

The LED modules are mounted with min. 2 screws per module. In order not to damage the modules only rounded head screws and an additional plastic flat washer should be used.

Precautions In Handling

1, LED Lighting for white light are devices which are materialized by combining white LEDs. The color of white light can differ a little unusually to diffuser plate (sign-board panel).

2, Handling

Don't drop the unit and don't give the unit any shocks.

Don't storage the Module in a dusty place or room.

Don't take the unit to pieces.

3, Cleaning

This LED Module should not be used in any type of fluid such as oil, organic solvent, etc.

It is recommended that IPA (Isopropyl Alcohol) be used as a solvent for cleaning the LED Module.

When using other solvents, it should be confirmed beforehand whether the solvents will dissolve the package and the resin or not. Freon solvents should not be used to clean

the LEDs because of worldwide regulations. Do not clean the LED Module by the ultrasonic.

Before cleaning, a pre-test should be done to confirm whether any damage to the LED Lighting will occur.

4, Static Electricity

Static electricity or surge voltage damages the LED Lighting.

5, Discoloration

VOCs (volatile organic compounds) may be occurred by adhesives, flux, hardener or organic additives which is used in luminaires (fixture) and LED silicone bags are permeable to it. It may lead a discoloration when LED expose to heat or light.

This phenomenon can give a significant loss of light emitted (output) from the luminaires (fixtures). In order to prevent these problems, we recommend you to know the physical properties for the materials used in luminaires, it requires to select carefully.

5, Risk of Sulfurization (or Tarnishing)

The lead frame is a plated package and it may change to black. (or dark colored) when it is exposed to Ag (a), Sulfur (S), Chlorine (Cl) or other halogen compound. It requires attention.

Sulfide (Sulfurization) of the lead frame may cause a change of degradation intensity, chromaticity coordinates and it may cause open circuit in extreme cases. It requires attention.

Sulfide (Sulfurization) of the lead frame may cause of storage and using with oxidizing substances together. Therefore, LED is not recommend to use and store with the below list.: Rubber, Plain paper, lead solder cream etc.

6, Others

If over voltage which exceeds the absolute maximum rating is applied to LED Lighting,

it will cause damage Circuits (that LED is included) and result in destruction.

Do not directly look into lighted LED with naked eyes for long time.