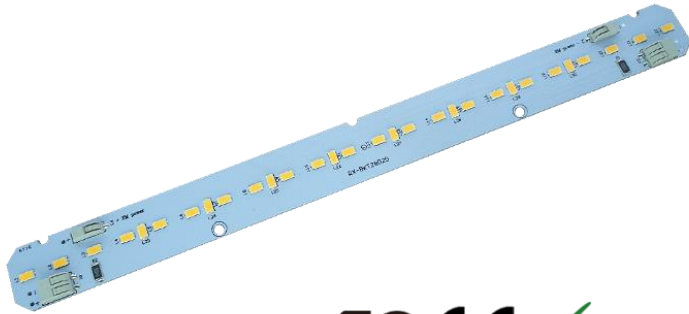


Description: RX-BKT57-28025, LED module / Small-sized LED umodule- Ideal for linear and panel lights. Combined LED module for general and emergency lighting. Integrated separate emergency LEDs controlled by EM power LED (2~4 W version). WAGO2060 Terminal Block, very easy to connect and remove the conductors. Perfectly uniform light, even if several LED modules are used together in a line. For a variety of lighting.



CRI: > 80

3000K/4000K/6000K

Up to 145Lm/W

4.72W 685Lm

10W 1210Lm

Size

280x25mm

22LED + 8 EM LEDs

Emergency LEDs

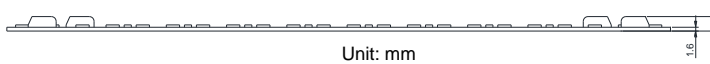
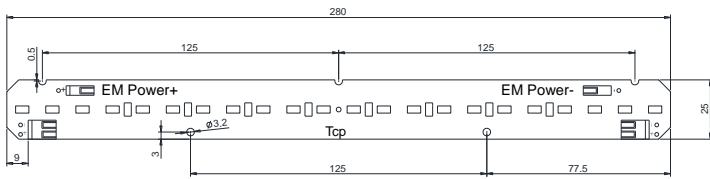
Integrated separate

Warranty

3 years

Safe and reliable

Low Voltage Input(31V~35V)



Unit: mm

Application specs

LED module Brightness NW: 685Lm@4.72W ; 1210Lm@10W

EM LED Brightness NW: 265Lm@2.1W

Default Colors CW6000~6500K

Other colors WW2800~3200K NW3800~4250K

Waterproof Rating IP20

Operating Temperature -22°F~185°F (-30~85°C) PCB /Tcp

Electrical specs

Power 4.72W @150mA; 10W@300mA

Input DC31.5V@150mA ; DC33.5V@300mA

Interconnect connection Max 4pcs @300mA 8pcs@150mA

Certification CE RoHS FCC

Life-Span >50000hours

Technical Data:

Part Number	Dimensions Net weight	CCT	LED QTY	Luminous flux Typ	Forward VoltageTyp	Test Current	Power Typ	Efficacy Typ	Tcp Test
RX-BKT57-28025-CW	280x25mm 35g	6000~6500K	11s 2p 22pcs + EM LEDs 2s 4P 8pcs	651Lm	31.5V	150mA	4.72W	138Lm/W	35°C
EM PowerLED				1130Lm	33.5V	300mA	10W	113Lm/W	65°C
RX-BKT57-28025-NW				3800~4250K	256Lm	6V EMP	350mA	2.1W	122Lm/W
EM PowerLED		685Lm			31.5V	150mA	4.72W	145Lm/W	35°C
RX-BKT57-28025-WW		2800~3200K			1210Lm	33.5V	300mA	10W	121Lm/W
EM PowerLED				265Lm	6V EMP	350mA	2.1W	126Lm/W	37°C
RX-BKT57-28025-WW	660Lm		31.5V	150mA	4.72W	140Lm/W	35°C		
EM PowerLED	1150Lm	33.5V	300mA	10W	115Lm/W	65°C			
				260Lm	6V EMP	350mA	2.1W	123Lm/W	37°C

Note: Beam characteristic 120°, Ripple max. 15% of typ. forward current; Max. permissible surge current: 0.7 A, duration max. 10 μs

Tolerance range for optical and electrical data: ±10%.

Maximum Rated Values

Part Number	Forward Current	Forward Voltage
RX-BKT57-28025	350mA	34.1V@350mA
EM PowerLED	600mA	6.3V@600mA

Thermal Characteristics

Storage Temperature, TSTG	-30 ~ +85°C
Operating Temperature, Top	-30 ~ +85°C
Max. Solder Point Temp., T _{cp}	85°C

Standard Driver Options

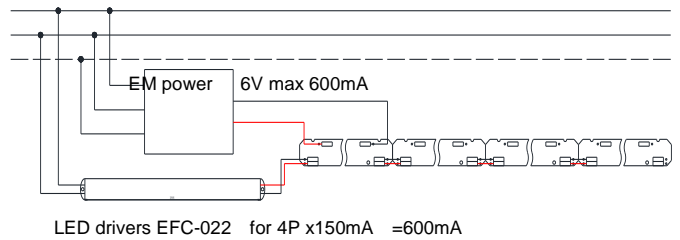
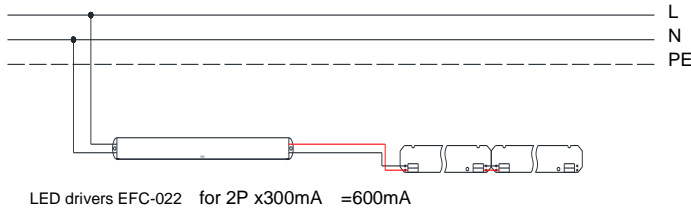
	Low brightness 145Lm/W	High brightness 121Lm/W
EFC-09 170mA	1S/7.5W	--
EFC-09-300mA	2P/12W	1S/13W
EFC-022-600mA	4P/21W	2P/23W
HLG-40H-36	6P/40W	3P/45W

Part Numbering

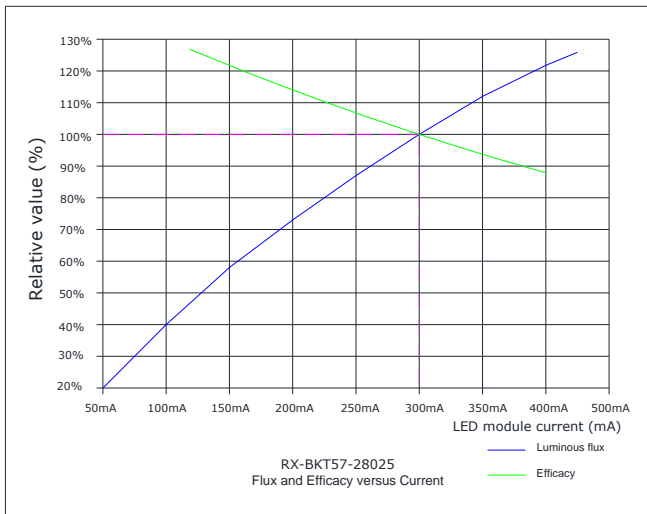
RX-BKT	-57	-XXXX	-XX
LED Model	PCB Size	Photometric Code	
		CW6000~6500K	
		NW3800~4250K	
		WW2800~3200K	

Where 1S = 1 Module, 4P is 4 Module in parallel etc; Power includes drivers consumption

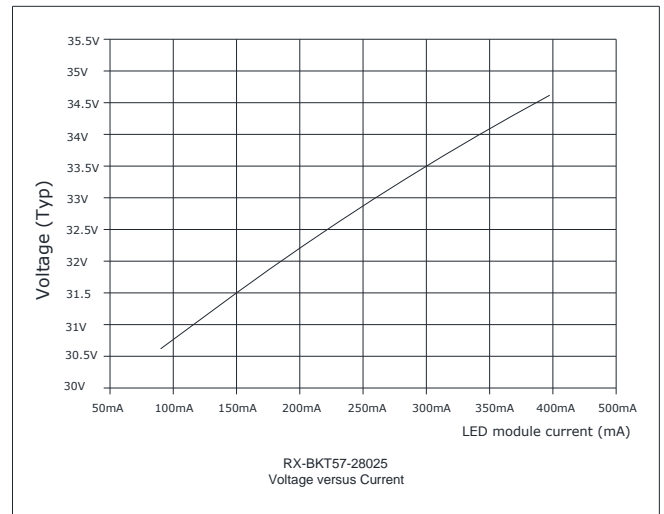
For example: EFC-022-600mA drive of 4pcs parallel 150mA modules or 2pcs 300mA modules



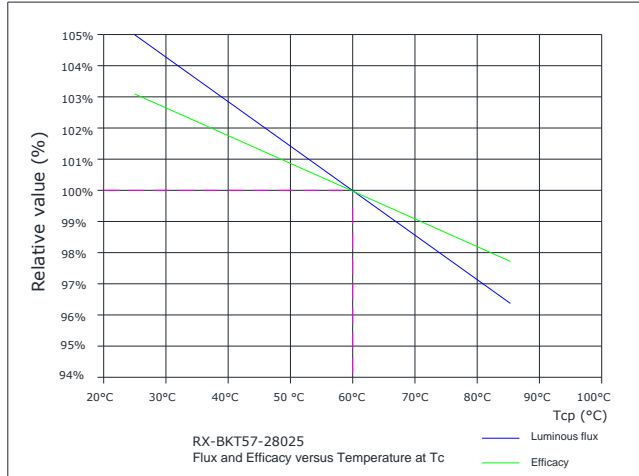
Flux and Efficacy versus Current



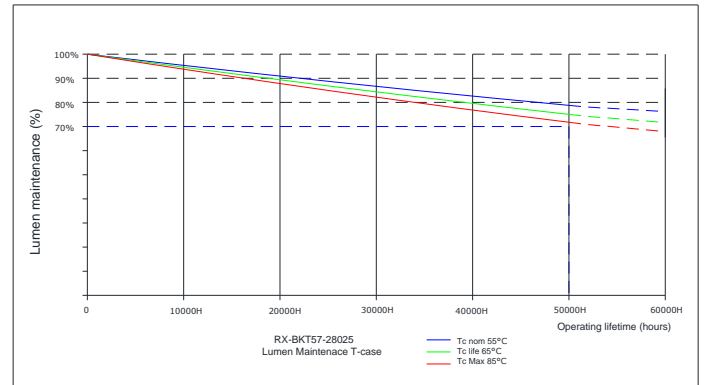
Voltage versus Current



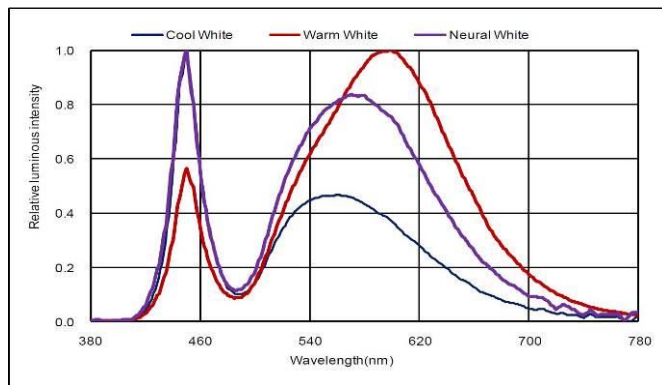
Flux and Efficacy versus Temperature at Tc



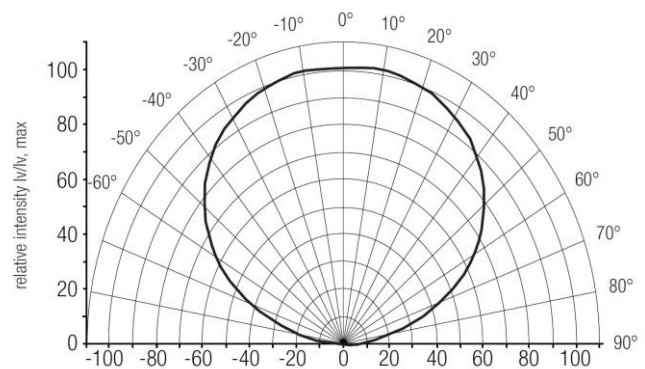
Lumen Maintenance T-case



Relative spectral emission



Light distribution



Thermal design and heat sink

The rated life of products depends to a large extent on the temperature. If the permissible temperature limits are exceeded, the life of the umodule will be greatly reduced or the umodule may be destroyed.

Tc point, ambient temperature and lifetime

The temperature at tp reference point is crucial for the light output and life time
For umodule a tp temperature of 65 °C has to be complied in order to achieve an optimum between heat sink requirements, light output and life time.

Compliance with the maximum permissible reference temperature at the tc point. must be checked under operating conditions in a thermally stable state.

The maximum value must be determined under worst-case conditions for the relevant application.

The tc and tp temperature of LED modules from are measured at the same reference point (Tcp)

Notes

The actual cooling surface can differ because of the material, the structural shape, outside influences and the installation situation. Depending on the heat sink a heat conducting paste or heat conducting film might be necessary to keep the specified tp temperature.

Heat sink values

Ambient Temperature Ta	Reference point Tp	Forward current	Rth, hs-a	Cooling area
25 °C	35 °C	150mA	self cooling	--
35 °C	35 °C	150mA	self cooling	--
45 °C	55 °C	150mA	self cooling	--
55 °C	65 °C	150mA	6.0 K/W	111 cm ²
25 °C	65 °C	300mA	6.0 K/W	111 cm ²
35 °C	65 °C	300mA	4.5 K/W	149 cm ²
45 °C	65 °C	300mA	2.9 K/W	227 cm ²
55 °C	65 °C	350mA	--	--

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 store 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.