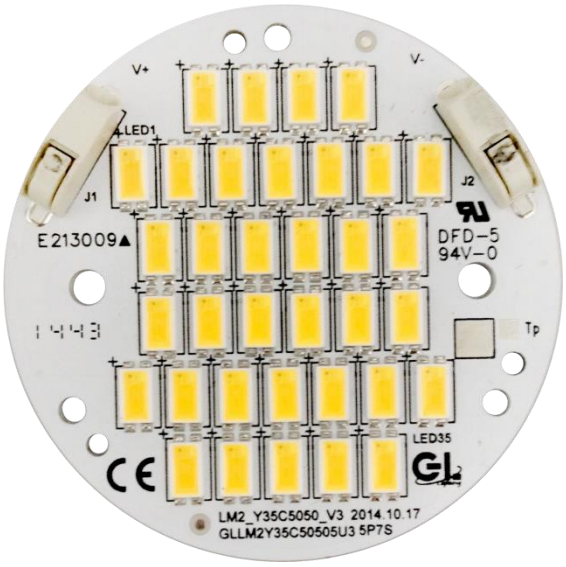


DATA SHEET
GLV92C50501 Series

SimpleLED ® GLV92C50501 SERIES

The LED module consist s of 35 LM561B Plus LEDs. It is engineered to provide customers with the flexibility to select the optimal light source for their applications. The module series complies with IEC62031 Class III and can be connected with a UL Class 2 driver (alternative configurations should be confirmed.).

PRODUCT DESCRIPTION

Multiple CCTs available (27000K-5000K)

80& 90 minimum CRI options

Targeted 3 SDCM color binning

LM-80 compliant mid-power LEDs

3-Year Warranty

TARGET APPLICATIONS

Down Lighting
Recessed Lighting
Flood Lighting
Low Bay
High Bay
Area Lighting

APPLIED STANDARDS

IEC 62031, IEC 60068-2, UL8750

Note: All specifications are subject to change without notice.

SimpleLED ® GLV92C50501-JE35 WHITE SERIES

PARAMETER	CONDITIONS
PCB	MCPCB with Φ50mm
	UL component file number: E250937
Emitter Type	35 x LM561B Plus LEDs
	UL component file number: E347623
Circuit Layout	5P x 7S
Connector Type	Wago connector: 2060-451/998-404
Thermal Resistance (p-n junction to Ts)	Rth= 15 ℃/W

PRODUCT SELECTION GUIDE

PART NUMBER (WITHOUT CONFORMAL COATING)	PART NUMBER (WITH CONFORMAL COATING)	CCT	CRI (min.)
GLV92C50501/CW-JE35I27A	GLV9FC50501/CW-JE35I27A	2700K	80
GLV92C50501/CW-JE35I30A	GLV9FC50501/CW-JE35I30A	3000K	80
GLV92C50501/CW-JE35K30A	GLV9FC50501/CW-JE35K30A		90
GLV92C50501/CW-JE35I35A	GLV9FC50501/CW-JE35I35A	3500K	80
GLV92C50501/CW-JE35I40A	GLV9FC50501/CW-JE35I40A	4000K	80
GLV92C50501/CW-JE35K40A	GLV9FC50501/CW-JE35K40A		90
GLV92C50501/CW-JE35I50A	GLV9FC50501/CW-JE35I50A	5000K	80

Note: All specifications are subject to change without notice.

BOARD OPTICAL CHARACTERISTICS (@ 350mA, Ts=25 ℃)

BOARD	CCT	CRI	FLUX (lm)		EFFICACY (lm/W)	
			MIN.	TYP.	MIN.	TYP.
GLV92C50501/CW-JE35	2700K	80	1127	1202	155	171
	3000K	80	1146	1221	158	174
		90*	851	926	116	130
	3500K	80	1165	1240	160	176
	4000K	80	1202	1277	165	182
		90*	945	1021	129	144
	5000K	80	1240	1315	170	187

BOARD OPTICAL CHARACTERISTICS (@ 500mA, Ts=25 ℃)

BOARD	CCT	CRI	FLUX (lm)		EFFICACY (lm/W)	
			MIN.	TYP.	MIN.	TYP.
GLV92C50501/CW-JE35	2700K	80	1575	1680	148	163
	3000K	80	1601	1706	150	166
		90*	1142	1243	109	123
	3500K	80	1628	1733	153	168
	4000K	80	1680	1785	158	173
		90*	1269	1370	121	135
	5000K	80	1733	1838	163	179

BOARD OPTICAL CHARACTERISTICS (@ 700mA, Ts=25 ℃)

BOARD	CCT	CRI	FLUX (lm)		EFFICACY (lm/W)	
			MIN.	TYP.	MIN.	TYP.
GLV92C50501/CW-JE35	2700K	80	2100	2240	138	152
	3000K	80	2135	2275	140	155
		90*	1575	1715	107	121
	3500K	80	2170	2310	143	157
	4000K	80	2240	2380	147	162
		90*	1750	1890	119	133
	5000K	80	2310	2450	152	167

* For CRI90 version, LED used is still LM561B. Will update the data when LM561B plus is available.

BOARD ELECTRICAL CHARACTERISTICS*

		Min.	Typ.	Max.
@350mA	Voltage (V)**	19.4	20.1	20.8
	Total Board Power (W)	6.79	7.03	7.27
@500mA	Voltage (V)**	19.9	20.6	21.3
	Total Board Power (W)	9.94	10.29	10.64
@700mA	Voltage (V)**	20.3	21.0	21.7
	Total Board Power (W)	14.19	14.70	15.21

Note: All specifications are subject to change without notice.

ENVIRONMENTAL CHARACTERISTICS

	Min.	Max.
Storage Temperature	**-40ºC**	**100ºC**
PCB Temperature (T_p)	**-40ºC**	**80ºC**

NOTES

* Based on nominal LED datasheet values (65 mA, T_s = 25ºC). Use for reference only since application temperature and LED driver current have an influence on lumen output and forward voltage. Safe operation only possible by the use of an external constant-current source. The current source used for operation, must have the following protections:

- Short-circuit protection
- Overload protection
- Over-temperature protection

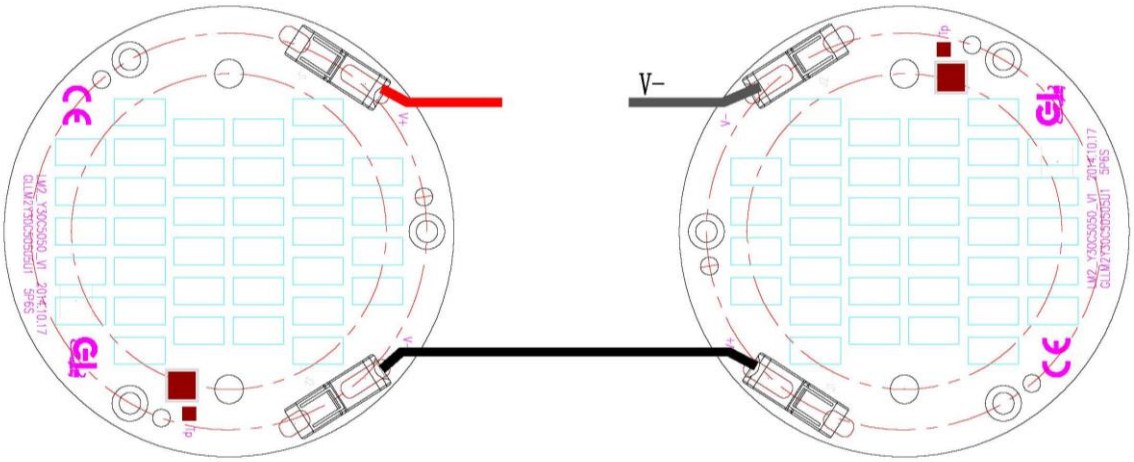
**LED SUPPLIER maintains a tolerance of ±0.1V on forward voltage measurements.

Proper current de-rating must be observed to maintain junction temperature below the maximum.

Different CCTs available upon request. Contact your local sales representative.

INTERCONNECTIVITY OPTIONS

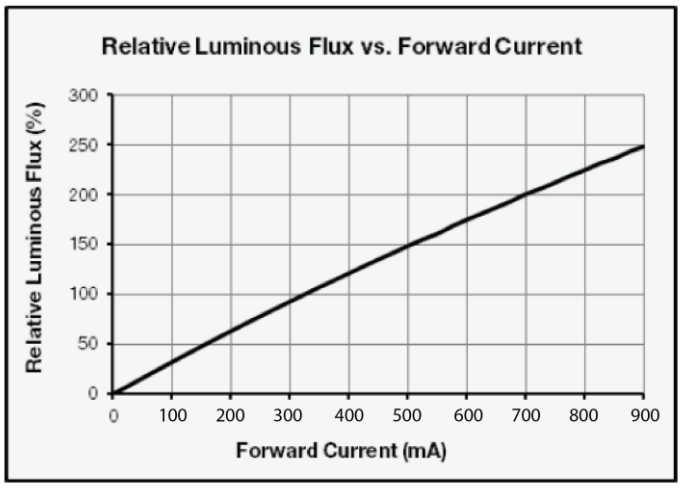
Board-to-Board wiring options and drawings.

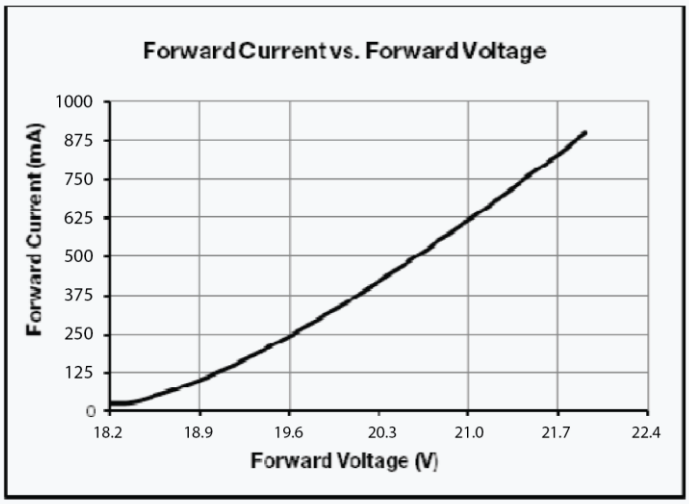


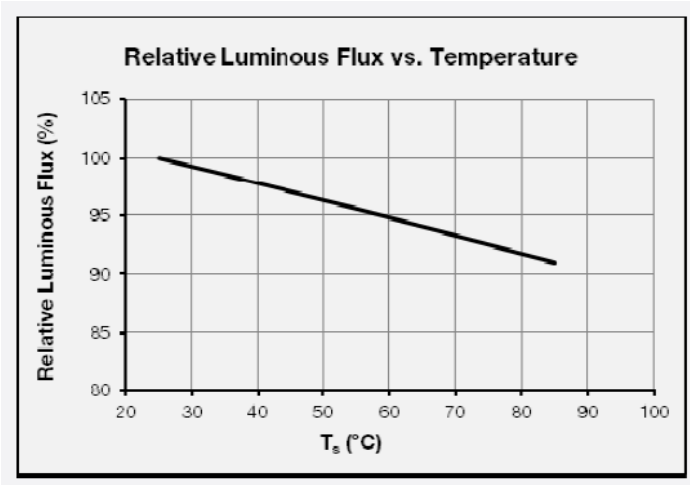
GLV92C84841/CW-JI90	
Maximum connection units	**8PCS in series**

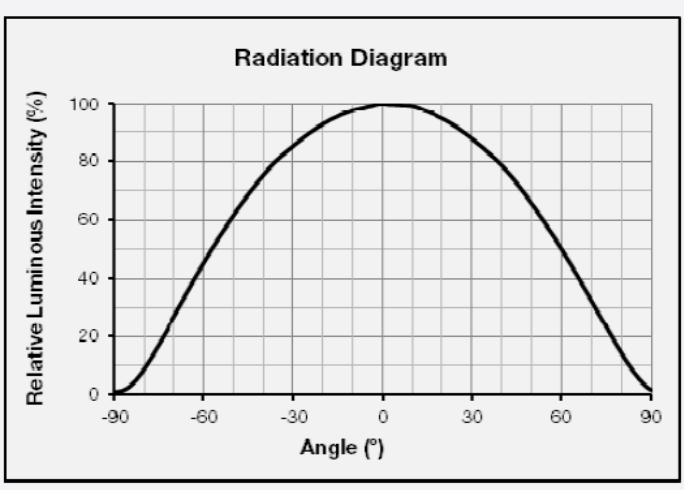
Note: All specifications are subject to change without notice.

TYPICAL CHARACTERISTICS GRAPHS







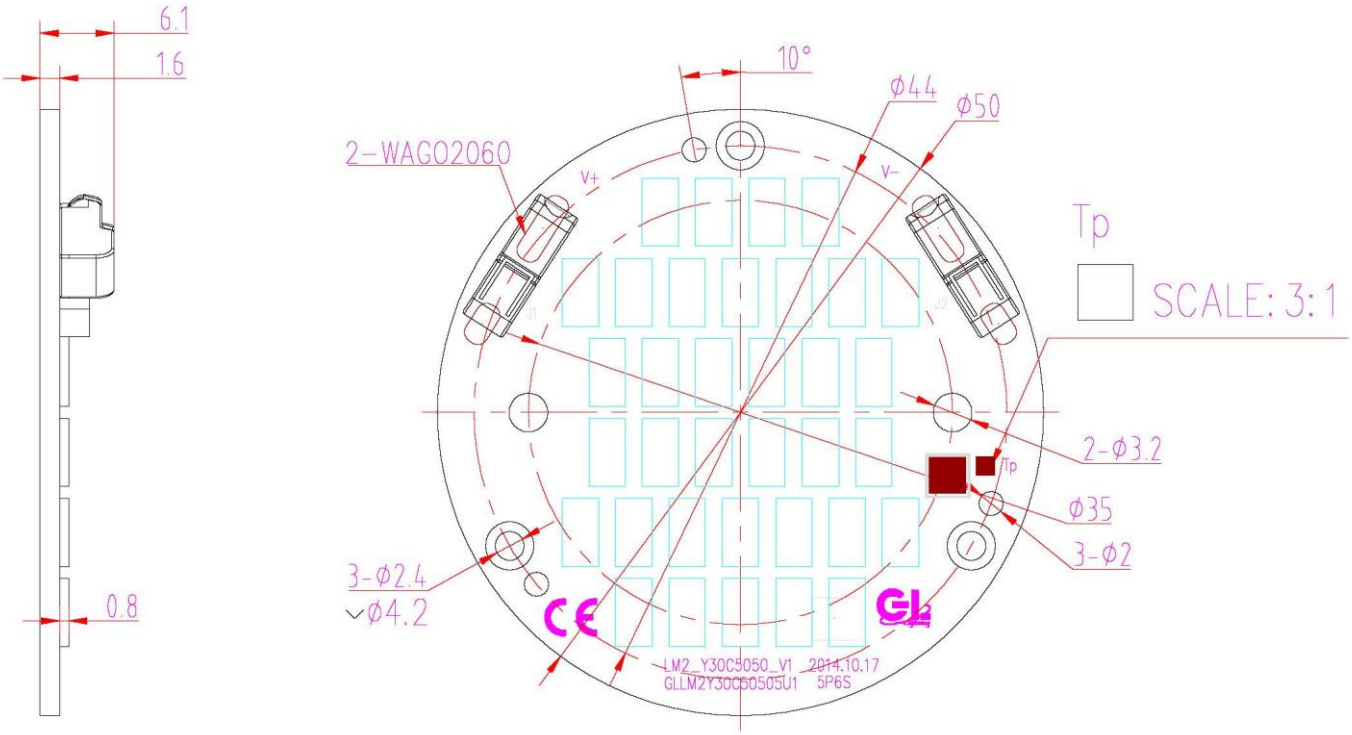


Note: All specifications are subject to change without notice.

* These curves are based on scaling up the LED curves and based on the sorting current for those LEDs.

MECHANICAL DIMENSIONS

All dimensions are in millimeters



Note: All specifications are subject to change without notice.

PART NUMBERING & ORDERING INFORMATION

1. PRODUCT SERIES

GLV92C50501

– Circular MCPCB with 35LEDs without conformal coating

GLV9FC50501

– Circular MCPCB with 35LEDs with conformal coating

2. CONNECTOR TYPE

CW – Wago connector 2060-451/998-404

3. LED TYPE

JE- 5630 mid-power LED 5P

4. NUMBER OF LED

35 – 35 LEDs

5. CCT

I27 – CRI80 2700K ANSI

I30 – CRI80 3000K ANSI

K30 – CRI90 3000K ANSI

I35 – CRI80 3500K ANSI

I40 – CRI80 4000K ANSI

K40 – CRI80 4000K ANSI

I50 – CRI80 5000K ANSI

6. FLUX BIN

A – S0 Bin

*Comment:

For CRI90 version, flux bin is S1.

(S1/SZ is acceptable for 4000K version)

Part Number :

GLV92C50501	/	CW	–	JE	35	I30	A
1		2		3	4	5	6

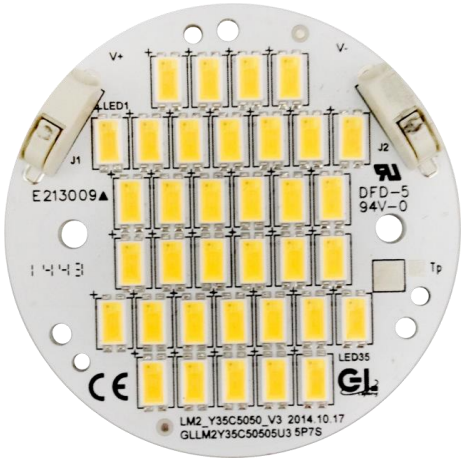
THERMAL CONSIDERATIONS

The LED module must be operated in environmental conditions where the ambient air temperature does NOT exceed a value which would cause the LEDs to exceed their maximum junction temperature (per the LED Supplier datasheet) or cause the maximum board temperature (Tp) to be exceeded.

A heat sink can be used with the LED modules in order to maintain the LED junction temperature and the PCB temperature below their maximum ratings however, the following recommendations should be followed:
•The mounting surface for the LED module must be flat;
•Avoid bending of the PCB to avoid damaging the LEDs and the solder connections;
•Use a thermal interface material between the PCB and the heat sink.

For optimal lifetime performance, the LED module must be placed in an environment where air can flow freely around the luminaire, promoting heat transfer from conduction to the heat sink and from radiation to the air. It is not recommended to expose the module to direct sunlight or any other heat source.

Thermal Measurement



The maximum allowed temperature at the T_P point of the board is 80℃. This temperature is not based on the LM-80 standard but is for warranty purposes only.

Note: All specifications are subject to change without notice.

Assembly and Safety Information

Installation must be done according to relevant regulations and standards. The following guidelines should be respected:

•Installation must be carried out in a voltage-free state;
•The LED module contains components that are sensitive to electrostatic discharge and may only be installed in the factory and on site if appropriate EOS/ESD protection measures have been taken;
•A thermal interface material should be applied to the base of the PCB before fixing it onto a heat sink with screws. The fixing/cooling surface must be cleaned prior to installing the PCB to remove all dirt, dust and grease. The LED module must not be bent to avoid damaging the LEDs.
•Use wire size AWG 24-18 to connect the PCB to the constant-current power supply.
•Conductors must be inserted at a 0º angle to the PCB.
•Wires must be stripped to 6-7 mm (solid & stranded).

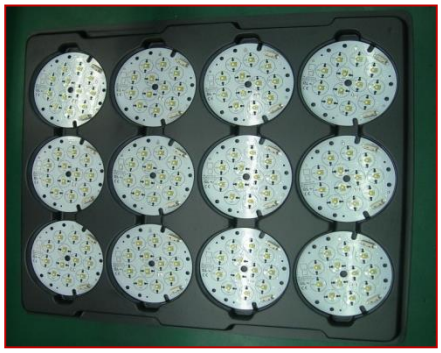
1. Insert solid conductors via push-in termination.
2. Insert/remove fine-stranded conductors by lightly pressing on the push-button

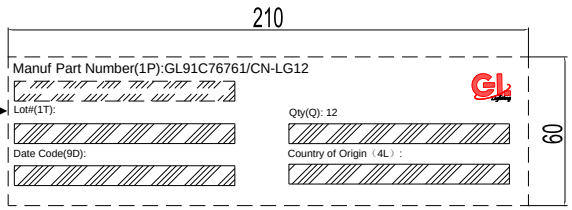
•The pressure on the LEDs will influence their reliability. Precautions should be taken to avoid such pressure.
•Do not stack PCBs on each other. LED materials are soft and this could lead to catastrophic failure of the LEDs.
•Chemicals can be harmful to the LEDs used on the module. It is recommended not to use chemicals anywhere in an LED system. The fumes from even small amounts of chemicals may damage the LEDs.
•Using corrugated boxes as packaging is only allowed if the sulfur used in the box is less than 850 ppm.
•Please ensure the correct polarity of the leads.
•For outdoor or damp locations, care must be taken to protect the LED PCB against moisture. There is the possibility of coating the board. Please contact your local sales representative for more information.

All of the above guidelines must be followed in order to qualify for the 3-year warranty. There is the possibility to extend to a 5-year warranty, please contact your local sales representative.

PACKAGING INFORMATION

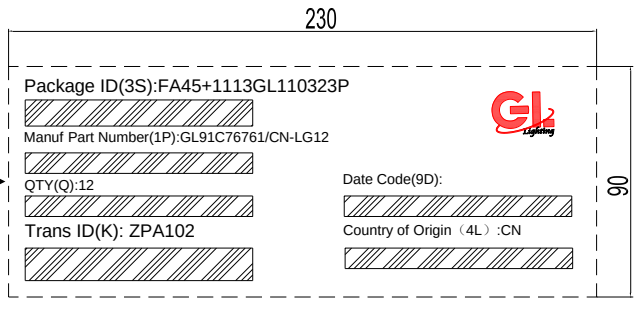
INNER PACKING	SIZE	TRAY	QTY
TYPE	345*295*11mm	1	20

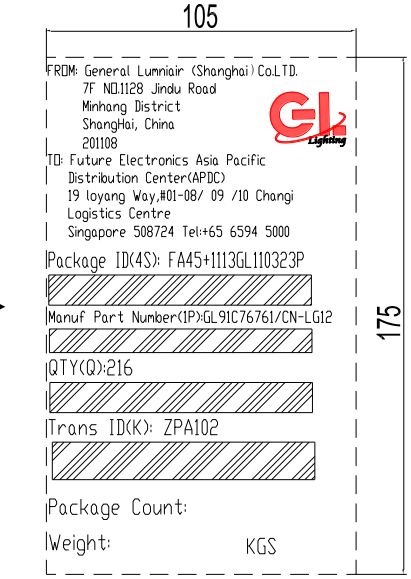




INNER PACKING	SIZE	TRAY	QTY
TYPE 1	350*300*250mm	15	300

PRODUCT LABELLING





Note: All specifications are subject to change without notice.

COMPANY INFORMATION

Founded in 1956 , GL Lighting quickly established itself as one of the leading architectural lighting companies within Asia.

In 1999 , GL Lighting recognized the importance of LED technology as a future industry leader in the emerging space of sustainable energy sources. Over the last decade, GL has devoted a large portion of its resources, research and development and energy in creating a line of LED luminaires second to none.

Striving to continue to lead the way, GL Lighting is comprised of a world class team of electrical, mechanical, electronic and optical engineers. GL Lightings managment team also hold specialties in controls, electronics, power management, optics and fixture design.

With research and development centers, offices and factories in Shanghai, Hong Kong and Taipei, GL Lighting continues to commit itself to creating the best in sustainable, energy saving lighting and luminairs for generations to come.

CONTACT DETAILS

For more information about General Luminaire's products and services, contact our distribution partner Future Lighting Solutions.

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Note: All specifications are subject to change without notice. Warranty provided by the manufacturer, GL-Lighting.