

Round LED modules 580mm

Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE, ENEC
- Available CCT from 2200K to 6500K and CRI 80, 90



RdLED CRI 80 CJ G4

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ Φ [lm]	Useful luminous flux ² [lm]	Voltage - Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 580mm 8000lm 830 48V CJ G4	1010 137 54646	3000	960	7857	8057	43	41	190	140	2800	C
RdLED 580mm 8000lm 830 168V CJ G4	1010 137 55246		275	7877	8077	151	42	190	40	800	C
RdLED 580mm 8000lm 840 48V CJ G4	1010 137 54846	4000	960	8171	8379	43	41	197	140	2800	C
RdLED 580mm 8000lm 840 168V CJ G4	1010 147 84546		275	8192	8400	151	42	197	40	800	B

RdLED CRI 80 CN G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ Φ [lm]	Useful luminous flux ² [lm]	Voltage - Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 580mm 8000lm 830 48V CN G3	1010 147 85046	3000	980	7673	7941	43	43	180	140	2100	C
RdLED 580mm 8000lm 830 168V CN G3	1010 147 85246		280	7673	7941	152	43	180	40	600	C
RdLED 580mm 8000lm 840 48V CN G3	1010 147 85146	4000	980	8095	8378	43	43	190	140	2100	C
RdLED 580mm 8000lm 840 168V CN G3	1010 147 85346		280	8095	8378	152	43	190	40	600	C

RdLED CRI 80 LG G2

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ Φ [lm]	Useful luminous flux ² [lm]	Voltage - Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 580mm 8000lm 830 48V LG G2	1010 147 84646	3000	1050	7826	8072	44	47	168	140	2800	D
RdLED 580mm 8000lm 830 168V LG G2	1010 147 84846		300	7826	8072	155	47	168	40	800	D
RdLED 580mm 8000lm 840 48V LG G2	1010 147 84746	4000	1050	8315	8577	44	47	178	140	2800	C
RdLED 580mm 8000lm 840 168V LG G2	1010 147 84946		300	8315	8577	155	47	178	40	800	C

RdLED CRI 90 EH1.1 G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ Φ [lm]	Useful luminous flux ² [lm]	Voltage - Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 580mm 8000lm 930 48V EH1.1 G3	1010 117 98346	3000	1070	7814	8048	46	49	158	140	2100	D
RdLED 580mm 8000lm 930 168V EH1.1 G3	1010 127 87346		305	7796	8030	162	49	158	40	600	D
RdLED 580mm 8000lm 940 48V EH1.1 G3	1010 117 96046	4000	1070	8302	8551	46	49	168	140	2100	D
RdLED 580mm 8000lm 940 168V EH1.1 G3	1010 127 87446		305	8284	8532	162	49	168	40	600	D

¹At nominal current and T_p²At nominal current and 25°C³It is recommended not to operate below minimum current in order to avoid un-even brightness

Tolerance range for optical and electrical ±10%

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Temperature & humidity

Specification item	Unit	Value
Tp	[°C]	45
Tp rated	[°C]	65
Tc	[°C]	85
Relative humidity (non-condensing)	[%]	5 ... 85
Storage ambient temperature	[°C]	-25 ... +85
Storage relative humidity (non-condensing)	]	5 ... 85

Tp - Temperature related to the performance parameters of the LED modules

Tp rated - Maximum operating temperature to which the rated performance characteristics are declared

Tc - Highest permissible value for safe operation

Technical data

Specification item	Unit	Value
Classification acc. to IEC 62031		built-in
Working voltage	[Vdc]	350
Beam angle	[deg]	120
Initial color consistency	[SDCM]	3
Photobiological safety		RG1 unlimited

Color coordinates

According to CIE 1931

Specification item	CIE _x	CIE _y
2700K	0.4578	0.4101
3000K	0.4338	0.4030
4000K	0.3818	0.3797
6500K	0.3123	0.3282

Certificates & standards

Specification item	Compliant
ENEC	Yes
CE	Yes
RoHS	Yes
REACH	Yes
IP rating	No IP rating

Lumen maintenance

for LE G5, LG G2, LA G3

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C>100 000	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	55°C>100 000	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	65°C>100 000	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	75°C>100 000	>100 000	>100 000	>100 000	>100 000	98 000	98 000
	85°C>100 000	>100 000	>100 000	>100 000	81 000	73 000	73 000
If max	45°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	55°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	65°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	75°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	85°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000

Calculated data based on LM80 LED data (12 000h)

for CJ G4, CN G3

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C>102 000	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	55°C>102 000	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	65°C>102 000	>102 000	>102 000	>102 000	>102 000	87 000	86 000
	75°C>102 000	>102 000	>102 000	>102 000	>102 000	74 000	73 000
	85°C>102 000	>102 000	>102 000	>102 000	>102 000	63 000	62 000
If max	45°C>102 000	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	55°C>102 000	>102 000	>102 000	>102 000	>102 000	97 000	96 000
	65°C>102 000	>102 000	>102 000	>102 000	>102 000	82 000	81 000
	75°C>102 000	>102 000	>102 000	>102 000	>102 000	69 000	68 000
	85°C>102 000	>102 000	>102 000	>102 000	>102 000	59 000	58 000

Reported data based on LM80 LED data (17 000h)

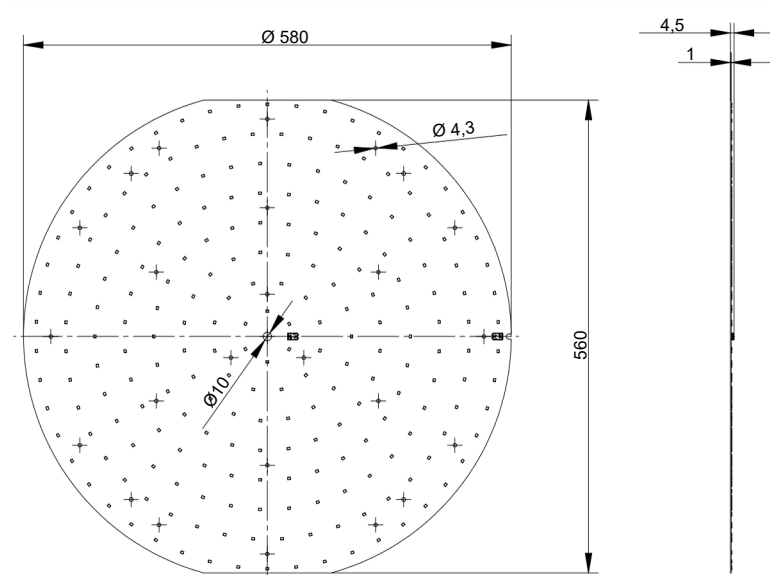
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Lumen maintenance

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
	55°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
	65°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
	75°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
	85°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
If max	45°C	>72 000	>72 000	>72 000	>72 000	64 000	60 000
	55°C	>72 000	>72 000	>72 000	>72 000	63 000	59 000
	65°C	>72 000	>72 000	>72 000	>72 000	62 000	57 000
	75°C	>72 000	>72 000	>72 000	>72 000	60 000	56 000
	85°C	>72 000	>72 000	>72 000	>72 000	59 000	55 000

Calculated data based on LM80 LED data (12 000h)

Dimensions



Mounting

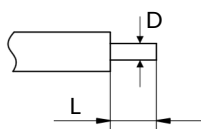
LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepeage distance between screw's head and surface of the pcb. Max. torque for fixing: 0,5Nm.

LED modules are sensitive to electrostatic discharge (ESD). Follow safety regulations according to IEC 61340-5-1.

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Wiring

Wirecrosssection and strip length:



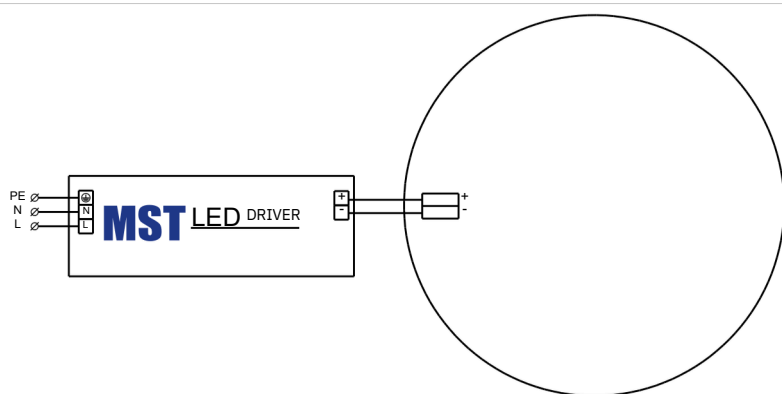
D - wire cross section (solid and flexible wires)	Min	Max
	0.2mm ²	0.75mm ²
	AWG 24	AWG 18

L - strip length	Min	Max
	8mm	9mm

Opening for the release of wires from the top
with release pin Electroterminal art. 881 167 884:



Connections



Energy Label / EPREL database

To obtain Energy Label for this product visit <https://eprel.ec.europa.eu/> and enter model identifier

Model identifier consists of 10 digits XXXX XXX XXX. It is printed directly on the LED module or on product label. This is the number you can see in EPREL database.

Ordering code consist of 12 digits XXXX XXX XXX46. Additional last two digits means packaging of the product.

Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
RdLED 580mm 8000lm 830 48V CJ G4	1010 137 54646	12	240	593 x 593 x 58
RdLED 580mm 8000lm 830 168V CJ G4	1010 137 55246	12	240	593 x 593 x 58
RdLED 580mm 8000lm 840 48V CJ G4	1010 137 54846	12	240	593 x 593 x 58
RdLED 580mm 8000lm 840 168V CJ G4	1010 147 84546	12	240	593 x 593 x 58
RdLED 580mm 8000lm 830 48V CN G3	1010 147 85046	12	240	593 x 593 x 58
RdLED 580mm 8000lm 830 168V CN G3	1010 147 85246	12	240	593 x 593 x 58
RdLED 580mm 8000lm 840 48V CN G3	1010 147 85146	12	240	593 x 593 x 58
RdLED 580mm 8000lm 840 168V CN G3	1010 147 85346	12	240	593 x 593 x 58
RdLED 580mm 8000lm 830 48V LG G2	1010 147 84646	12	240	593 x 593 x 58
RdLED 580mm 8000lm 830 168V LG G2	1010 147 84846	12	240	593 x 593 x 58
RdLED 580mm 8000lm 840 48V LG G2	1010 147 84746	12	240	593 x 593 x 58
RdLED 580mm 8000lm 840 168V LG G2	1010 147 84946	12	240	593 x 593 x 58
RdLED 580mm 8000lm 930 48V EH1.1 G3	1010 117 98346	12	240	593 x 593 x 58
RdLED 580mm 8000lm 930 168V EH1.1 G3	1010 127 87346	12	240	593 x 593 x 58
RdLED 580mm 8000lm 940 48V EH1.1 G3	1010 117 96046	12	240	593 x 593 x 58
RdLED 580mm 8000lm 940 168V EH1.1 G3	1010 127 87446	12	240	593 x 593 x 58