



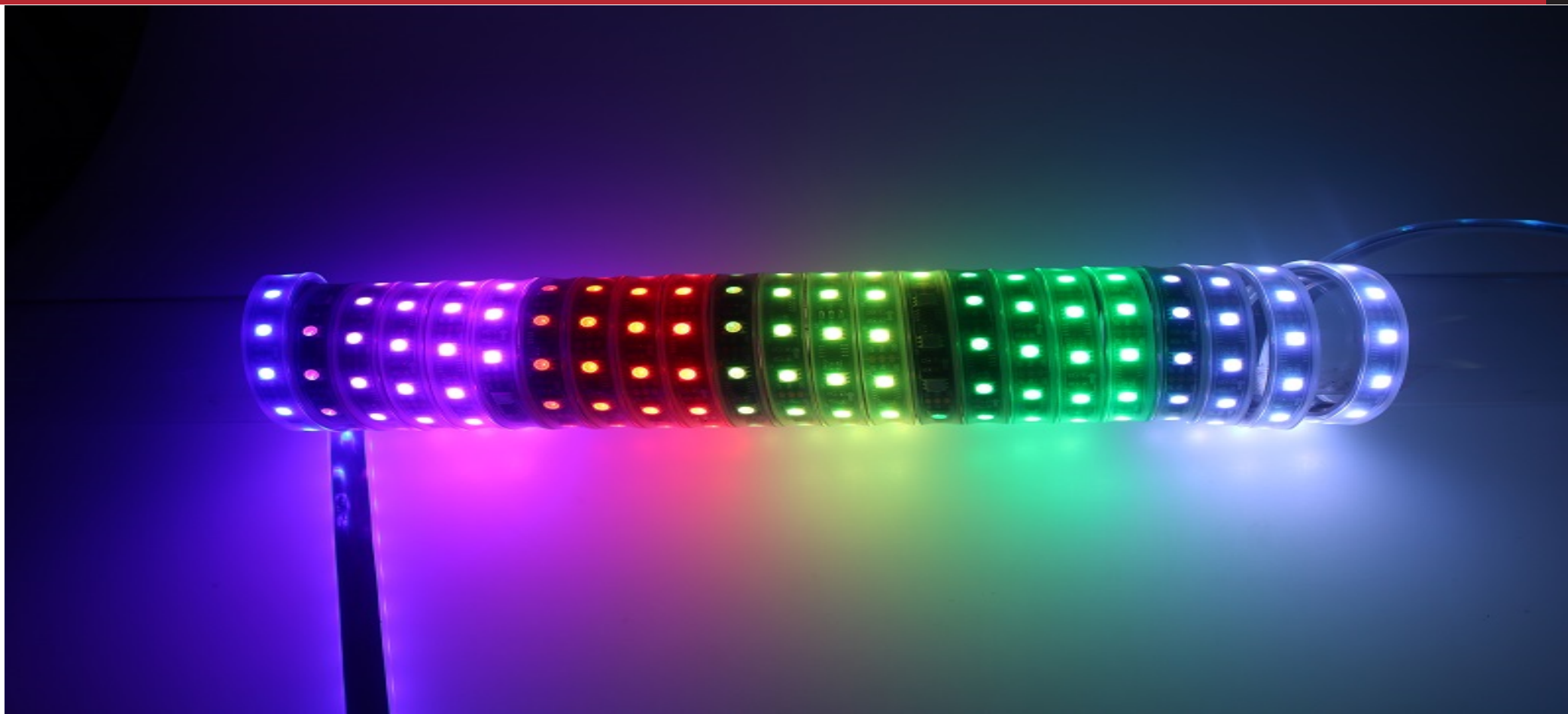
Rose Lighting

Model: RL-STR-TM1814-5050RGB-60-12V -10mm



<https://www.rose-lighting.com> TEL:0755-23763467 Phone:008618675649004 Email:info@rose-lighting.com

Add: No.53 Yuexing Rd, Guanlan Street ,Longhua District,Shenzhen, China 518110



Advantages

1. PWM refresh rate: 1.2kHz, transfer speed 800k bps
2. It comes in 1 meters per reel with 3Pin female/male JST SM connector on both end and separated Power / Ground Wires . Customized length is workable .
3. 12V (3leds one IC with 12V)
4. 2unce PCB boardwith double cooper layer(hongqi brand 3535 copper)
5. double sides membrane cover the pcb board. make sure the copper no drop from the pcb board
6. Flexible PCB material . ever 3 LEDcan be cut with 12V,
7. 60 leds per meter . 12V low voltage inputted , don't over 13V , otherwise you will destroy the entire strip .
8. Controller System-SD controller , DMX controller , Artnet and so on .(SPI protocol)
9. Installing : screw+silicon clip and 3M adhesive on back side for sticky

Technical Parameters

Part NO	RL-STR-TM1814-5050RGB-60-12v
Lighting Source	5050 RGBW led
Beam Angel	120 degree
Operate Voltage	DC12V
Consumption Watt/M	14.4 Watt per meter (max)
FPCB quality	Double layer 3535 Copper with 2Ounce
LED quantity /M	60 leds per meter
Luminance (mcd)	2100MCD for one RGB 5050 led
IC chip	TM1814 20pixels/12V
Cable	AWG20 with 10cm long
Plug	3pin SM JST Female and male connector
Waterproof Grade	IP20/65/67/68
Packaging	5m/reel
warranty	2 years

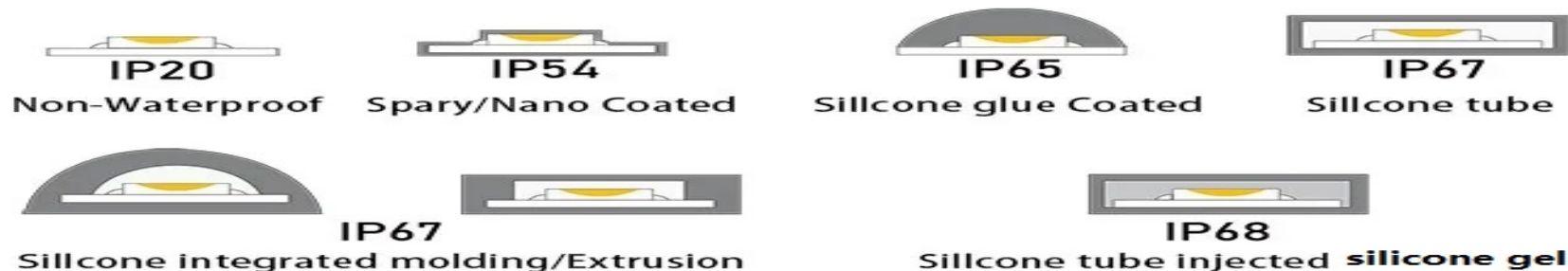
There is 3 Pin JST SM female/male connector on both end for signal input/output and power inputs at ends

Red : +12V ; Green: Data white:GND Input: Femal output : male

Signal wire define



IP rating



光电特性 Electro-optical characteristics

(T_A=25℃)

发光颜色 Emitted Color	参数 Parameter	符号 Symbol	测试条件 Test Condition	数值 Value			单位 Unit
				Min	Typ	Max	
红光 Red	主波长 Dominant Wavelength	λ _d	I _F =20mA	620	----	630	nm
	正向电压 Forward Voltage	V _f	I _F =20mA	1.8	----	2.4	V
	发光强度 Luminous Intensity	I _v	I _F =20mA	500	----	650	mcd
	发光角度 Viewing Angle	2θ1/2	I _F =20mA	----	120	----	deg
绿光 Green	反向漏电流 Reverse Current	I _R	I _F =20mA	----	----	10	μA
	主波长 Dominant Wavelength	λ _d	I _F =20mA	515	----	530	nm
	正向电压 Forward Voltage	V _f	I _F =20mA	2.8	----	3.4	V
	发光强度 Luminous Intensity	I _v	I _F =20mA	1000	----	1500	mcd
蓝光 Blue	发光角度 Viewing Angle	2θ1/2	I _F =20mA	----	120	----	deg
	反向漏电流 Reverse Current	I _R	I _F =20mA	----	----	10	μA
	主波长 Dominant Wavelength	λ _d	I _F =20mA	455	----	470	nm
	正向电压 Forward Voltage	V _f	I _F =20mA	2.8	----	3.4	V
白光 White	发光强度 Luminous Intensity	I _v	I _F =20mA	400	----	500	mcd
	发光角度 Viewing Angle	2θ1/2	I _F =20mA	----	120	----	deg
	反向漏电流 Reverse Current	I _R	I _F =20mA	----	----	10	μA
	CIE 坐标 CIE Coordinates	X	I _F =20mA	0.4282	0.4382	0.4482	----
白光 White		Y	I _F =20mA	0.3895	0.4045	0.4195	----
	色温 Color Temperature	CCT	I _F =20mA	2800	----	3200	K
	正向电压 Forward Voltage	V _f	I _F =20mA	2.8	----	3.4	V
白光 White	光通量 Luminous Flux	Φ	I _F =20mA	7	----	8	lm
	显色指数 CRI	Ra	I _F =20mA	80	----	----	----
	发光角度 Viewing Angle	2θ1/2	I _F =20mA	----	120	----	deg
	反向漏电流 Reverse Current	I _R	I _F =20mA	----	----	10	μA

Certifications



Wiring Chart

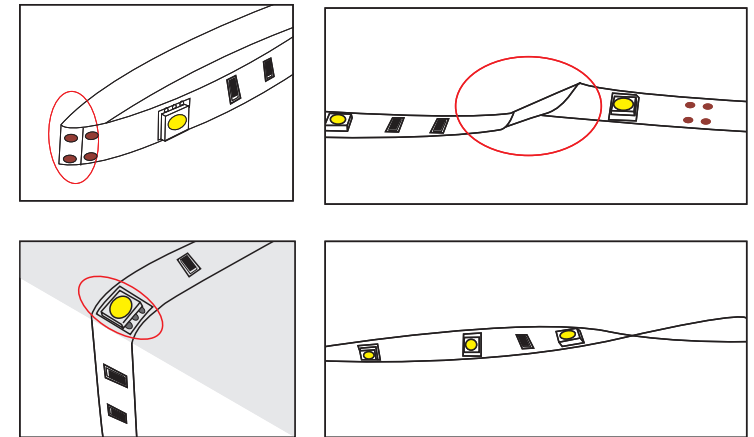


Note:

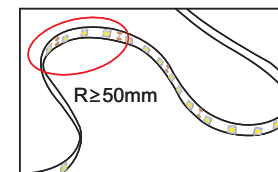
1. One Aluminum Foil Bag for one roll of LED strip, 5M/roll.
2. All the packaging materials are RoHS standard.
3. Heavy stuff are not allow to be loaded above the packaging box.

⚠ Cautions:

- When install the led strip , please note the installation technique. The led strip can be bent, but not distorted, as shown below:



Distortion(Wrong)



Bend(Right)

- LED strips are low voltage products, you must use the power supply(transformer). Please don't connect the led strip directly to the AC110 or AC220V, otherwise it will burn out the LED strips.
- Clean up the installation surface, it will ensure the reliability of the adhesive.
- The electrical connection process must be operated by a professional person.

Package

