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AB-FZA005I4-11812-XS2

Features:

- UL listed
- IP20 waterproof rating
- Side emitting
- Environment temperature -40°C~45°C
- Operating temperature -40°C~85°C
- Storage temperature -40°C~85°C
- Environment humidity 40-70%RH

Application:

- Conference/meeting rooms
- Hospitals
- Commercial/ residential buildings
- ReEntertaining lighting
- Hotels

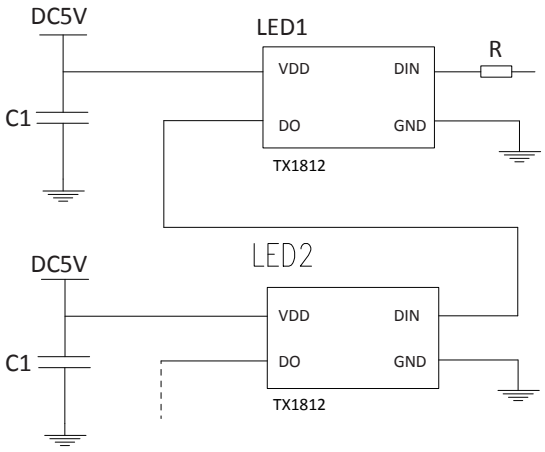
Product performance parameter:

Serial number	Part Number	Color	nm	QTY/M (39.3in)	Luminous per meter	lm/w	working voltage (5V)/IF(A)	Rated power (W/M)
1	AB-FZA005I4 -11812-XS2	Red	620-630nm	60LED	127lm	15/W	5V/0.72A	3.6
		Green	520-530nm		425lm	50/W	5V/0.72A	3.6
		Blue	455-465nm		102lm	12/W	5V/0.72A	3.6

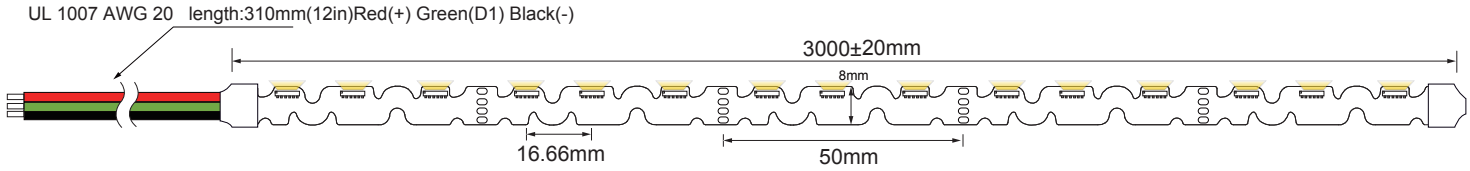
Notes :

1. Luminous flux plus or minus 10% is allowed in the floating.
2. Maximum length current attenuation 15%.
3. Photometric standards are based on CIE eye sensitivity curve diagram test.

Schematic diagram:



Product size chart:



1. UNIT:MM
2. COLOR:WHITE
3. PCB: Double-layered FPCB: 1 front + 1 back: 2-layer Cu (1oz + 1oz) --- 0.25 ± 0.05mm
4. 3M 9495 double-sided tape on the back

Technical Specs for the LED with built-in driver:

TC4018RGB-3CJH is an intelligent external controlled LED light source integrating control circuit and luminous circuit. Its appearance with a 4018LED The lamp bead is the same, each element is a pixel point. The pixel contains an i ntelligent digital interface data locking signal shaping and amplifying drive Dynamic circuit, power supply voltage stabilizer circuit, built-in constant current circuit, high precision RC oscillator, output drive using patented PWM technology, effective protection The color consistency of pixel point luminescence is proved .

Features:

- Control circuit and RGB chip in SMD 3838 packages
- Single-Wire Interface for line data transmission
- Gray scale adjustment circuit (256 gray level adjustable);
- Data Transfer Maximum Rate: Bits per Second (bps): up to 800 kbps,

Absolute maximum ratings:

Absolute maximum ratings at Ta=25℃

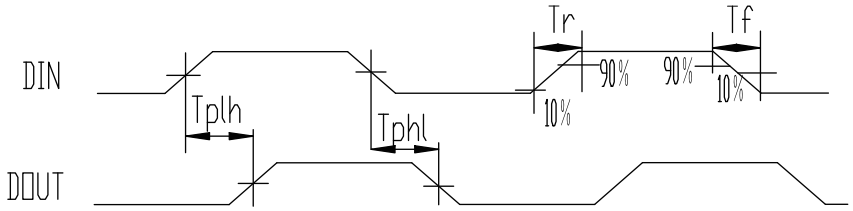
Parameter	Symbol	Value	Unit
Power Supply Voltage	VDD	3.5-5.5	V
LED Voltage	VLED	-0.5-0.5	V
Operating temperature range	Top	-40~85	℃
Storage temperature range	Tstg	-40~120	℃

IC Electric Spec

Parameter	symbol	Min.	typ	Max.	Unit
R/G/B output port withstand voltage	Vdd	8.5	9	9.5	V
OUT output current	Iout	9.6	12	14.4	mA
High level input voltage	VIH	0.7	0.9	-	V
Low level input voltage	VIL	0	0.1	0.3	V
PWM Frequency	FPWM	3	4	5	KHZ
Quiescent dissipation	IDD	0.6	0.8	1	mA

Communication Protocol and Sequence:

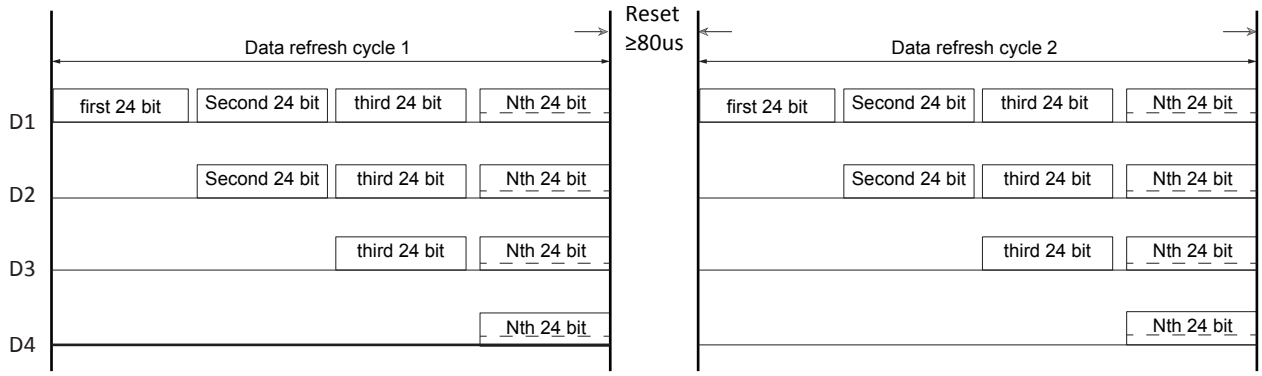
Input Code:



The data transmission time:

Symbol	Description	min	Typ	Max
T0H	0 code, high level time	245nS	295nS	395nS
T1H	0 code, low level time	545nS	595nS	645nS
T0L	1 code, high level time	545nS	595nS	645nS
T1L	1 code, low level time	245nS	295nS	345nS
TRES	Reset code, low level time	80uS	- -	- -

Data Transmission Mode:



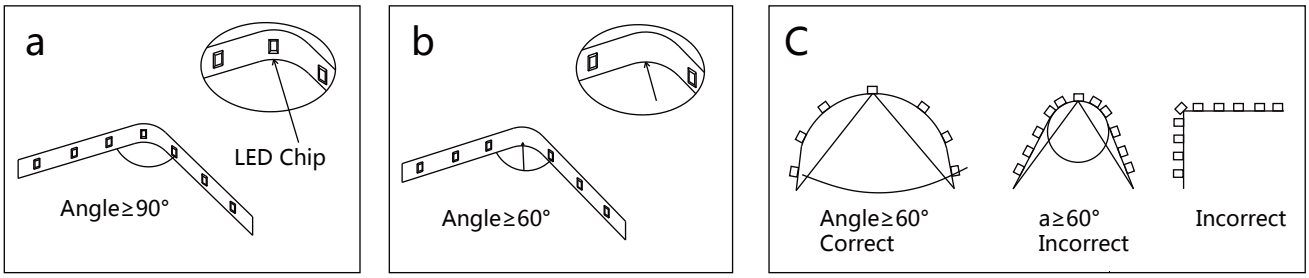
Note: the D1 data is from MCU, and D2, D3, D4 is forwarded through automatic shaping cascade circuit.

24 bit Data Structure:

G7	G6	G5	G4	G3	G2	G1	G0	R7	R6	R5	R4	R3	R2	R1	R0	B7	B6	B5	B4	B3	B2	B1	B0

Note: Data transmission sequence GRB, higher bit is sent first.

LED Strip Installation

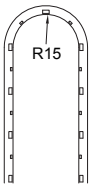


a: use an angle greater or equal to 90 degrees when there is an LED chip on the corner while placing the strip in a concave position （Angle≥90degree)

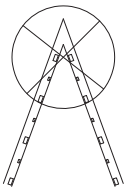
b: use an angle greater or equal to 60 degrees when there is an LED chip on the corner while placing the strip in a concave position （Angle≥60degree)

c:use an angle greater or equal to 60 degrees when there is an LED chip on the corner while placing the strip in a concave position （Angle≥60degree) In the convex position the angle should not reach 90 degrees .See above diagram.

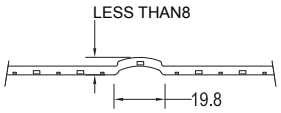
Maximum Flexibility Precaution



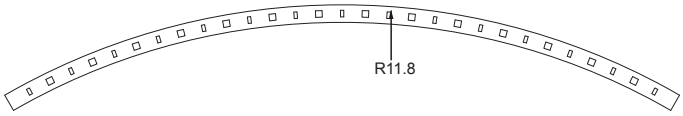
NOTE: DO NOT BEND TO A RADIUS OF LESS THAN 0.59 INCH



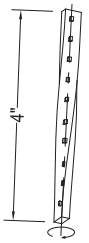
NOTE: SHARP BENDING ISN'T ALLOWABLE



NOTE: DO NOT AXIAL BEND TO THE HEIGHT OF MORE THAN 19.8mm WITHIN 0.78 INCH SEGMENT

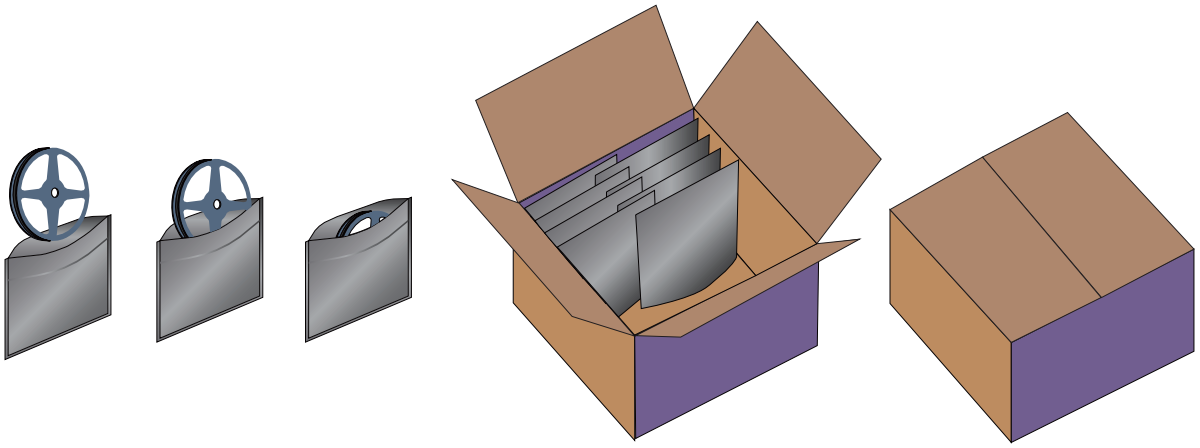


NOTE: DO NOT HORIZONTAL BEND TO A RADIUS OF LESS THAN 18 INCH



NOTE: DO NOT TWIST MORE THAN 90° OVER THE LENGTH OF ONE 24v SEGMENT/ TWO 12V SEGMENTS (4" TOTAL LENGTH)

Product packaging



Model	Part number	box(pcs)	Net Weight/box	Gross Weight/box
1	AB-FZA005I4-11812-XS2	40		