

## SUPER LED

### PRODUCT FEATURES

- Our LED is integrated with driver IC and wide application
- Increases safety by better device reliability and visibility
- Save energy and maintenance cost
- Create more than one billion colors
- Entire cabinet comply with IP65
- Replace LED and display LED



### APPLICATION

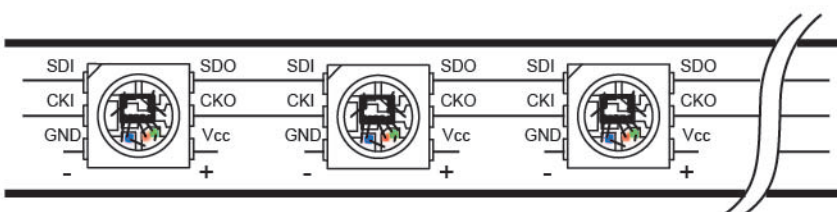
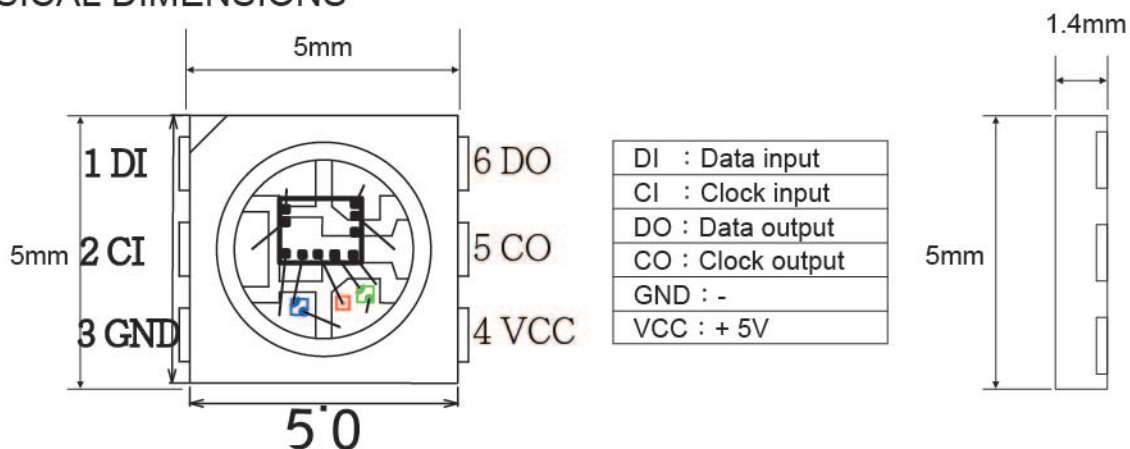
- Architectural lighting
- Landscape lighting
- Signage
- LED displayer



### PRODUCT SPECIFICATIONS

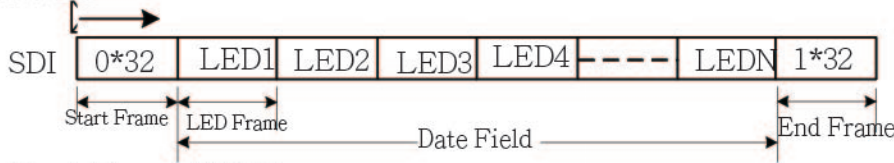
Model number	Color	Millicandela	refresh rate	Applied voltage	Power consumption	View angle	weight (g)	Dimensions(mm) L x W x D	Operating temperature
SUPER LED APA-102C	Full Color 16777216	R 300-330 mcd G 420-460 mcd B 160-180 mcd	400 cycle	5VDC	0.2W (MAX:1W)	H:160	0.1	5x5x1.4	-40°C~70°C

### PHYSICAL DIMENSIONS

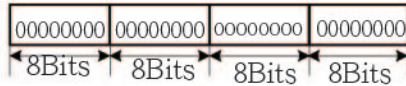


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Tabdem N-LED



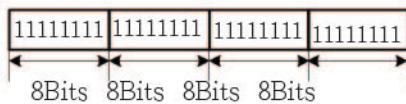
Start Frame 32 Bits



LED Frame 32 Bits



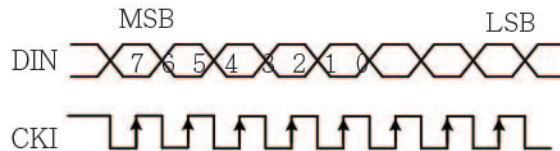
LED Frame 32 Bits



Global bit : 5-bit ( 32 level ) brightness setting, while controlling R, G, B three-color constant current output value, if set the Global bit for the 10000 ( 16/31 ) is the output current is half again the original PWM settings.

DATA MSB ←→ LSB	Driving Current
00000	0/31
00001	1/31
00010	2/31
...	
11110	30/31
11111	31/31(max)

PWM input and output signals Relations



Data MSB—	Duty Cycle
00000000	0/256(min)
00000001	1/256
00000010	2/256
...	
11111101	253/256
11111110	254/256
11111111	255/256(max)

2).The number of pixels per second sent to CKI frequency ( FCKI ) minus the Start Frame bit divided by the number 40 the number of LED Frame bit 32, if CKI frequency ( FCKI ) to 512KHz, the pixel number ( 512000-40 ) /32=15998, if the 50 second update Views can be connected in series LED number 15998/50=319.To increase the number of cascaded IC CKI frequency to be increased.

(3).POLAR to empty , R, G, B for the negative output; POLAR access VSS, R, G, B is positive output.

(4).VEN: Self-detection

Data Field to the middle of 3bit were B, G, R in the MSB of the opposite phase, otherwise regarded as invalid data. VEN close to empty when the self-detection: when VEN VSS then activated self-detection.

(5).CSEL to empty when the CKO and CKI RP :CSEL connected with VSS when the CKO compared with CKI.