

## Package Dimensions

P/N: EDG102W  
10X10MM GREEN SMD LED

### Application Notes:

Wiring connections should only be made on the designated soldering pads (marked "+/- 12V"). Soldering process should not exceed 10 seconds at 260°C.

Module can be trimmed to the desired length by cutting along the marked line between the soldering pads.

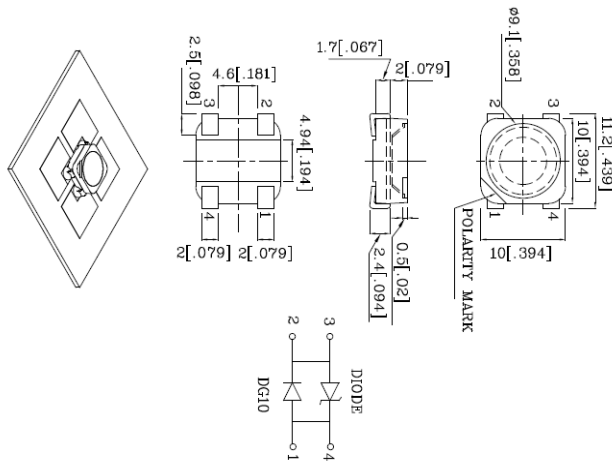
Each module has a maximum length of 364mm. A maximum of ten modules (or 3640mm in total module length) may be connected to one power supply. The power supply should be connected near the middle of the module strip (see figures on Page 4).

The power supply should contain an appropriate fuse to insure the electrical current do not exceed maximum tolerance of the light modules.

The module should not be exposed to humid or dusty environments. Additional protection may be necessary for use in harsh conditions.

The minimum bend radius of the PCB is 2cm. Sharp bends should not be made near an LED or electronic component.

The flexible PCB of the light module contains a self-adhesive backing which can be attached to different surfaces. The bonding surface should be dry and cleaned of oils, silicone, or dirt residue. The mounting surface should be mechanically strong enough to support the light module. The backing tape can be removed from the PCB and the exposed adhesive surface can be attached to the substrate by applying approximately 20 N/cm<sup>2</sup> of pressure. The modules should be handled according to safe anti-static procedures. The adhesive is not recommended for use on untreated wood surfaces.



### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=350mA) cd		Luminous Flux (IF=350mA) lm		Viewing Angle 2 θ 1/2 [2]
			min.	typ.	min.	typ.	
Green	AlInGaN	Water Clear	16	25	40	65	60°

### Absolute Maximum Ratings at TA=25°C

Parameter	Symbol	Value	Unit
Power dissipation	P <sub>t</sub>	1.33	W
Junction temperature	T <sub>j</sub>	110	°C
Operating Temperature	T <sub>op</sub>	-40 To +85	°C
Storage Temperature	T <sub>stg</sub>	-40 To +85	°C
DC Forward Current [1]	I <sub>f</sub>	350	mA
Peak Forward Current [3]	I <sub>fm</sub>	500	mA
Thermal resistance [1]	R <sub>th</sub>	47	°C/W
Electrostatic Discharge Threshold (HBM)		8000	V

### Notes:

- 1 Results from mounting on PC board FR4 (pad size ≥ 100mm<sup>2</sup> per pad), mounted on pc board-metal core PCB is recommend for lowest thermal Resistance.
- θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
- 3.1/10 Duty Cycle, 0.1ms Pulse Width.

### Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Value	Unit
Wavelength at peak emission IF=350mA [Typ.]	λ <sub>peak</sub>	520	nm
Dominant Wavelength IF=350mA [Typ.]	λ <sub>dom</sub>	530	nm
Spectral bandwidth at 50%Φ <sub>REL</sub> MAX IF=350mA [Typ.]	Δλ	35	nm
Forward Voltage IF=350mA [Min.]	V <sub>f</sub>	2.7	V
Forward Voltage IF=350mA [Typ.]		3.3	
Forward Voltage IF=350mA [Max.]		3.8	
Temperature coefficient of I <sub>peak</sub> IF=350mA, -10°C ≤ T <sub>j</sub> ≤ 100°C [Typ.]	TC λ <sub>peak</sub>	0.16	nm/°C
Temperature coefficient of I <sub>dom</sub> IF=350mA, -10°C ≤ T <sub>j</sub> ≤ 100°C [Typ.]	TC λ <sub>dom</sub>	0.14	nm/°C
Temperature coefficient of V <sub>f</sub> IF=350mA, -10 ° C ≤ T <sub>j</sub> ≤ 100 ° C [Typ.]	TC <sub>v</sub>	-2.0	mV/° C