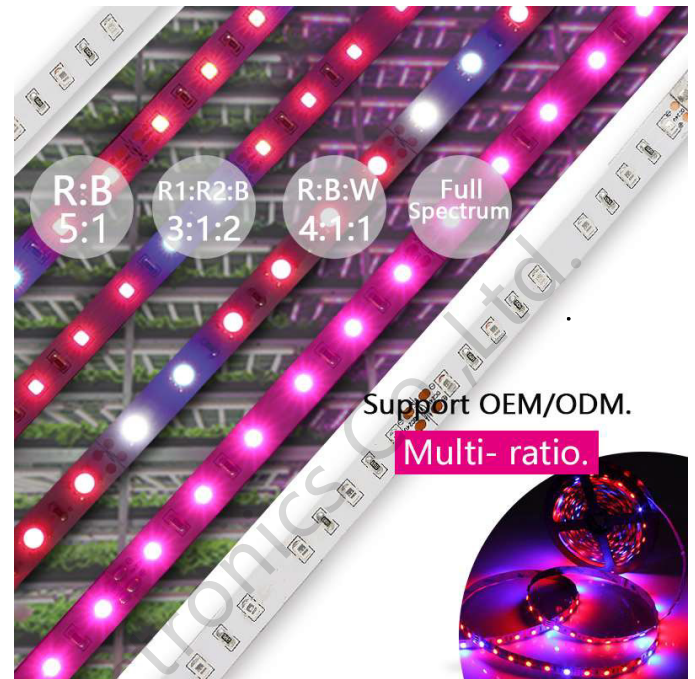


### Benefits

- Super bright 5050 2835 SMD top LED.
- Flexible ribbon for curving around bends
- OEM ODM are available.

### Applications

- hydroponic system
- Herb Grow
- flowering and fruiting



## Technical Operating Data

### LED Grow Strip

| Item No         | MX-DT2835A-14.4W            | MX-DT2835B-14.4W                             | MX-DT2835C-14.4W                             | MX-DT5050-14.4W |
|-----------------|-----------------------------|--|--|-----------------|
| LED Type        | SMD 2835 0.2W               | SMD 2835 0.2W                                | SMD 5050 0.2W                                | SMD 2835 0.2W   |
| LED Wavelength  | R=620-630nm;<br>B=460-470nm | R1=650-660nm;<br>R2=620-630nm<br>B=460-470nm | R=650-660nm;<br>B=460-470nm;<br>W=6000-6500K | Full Spectrum   |
| LED Qty         | 60 LED Per Meter            |  |  |                 |
| Power           | 14.4W per Meter             |  |  |                 |
| Working Voltage | 12/24V                      |  |  |                 |
| Size            | L100cm X W0,8cm             |  |  |                 |
| Life Span       | 50000 Hours                 |  |  |                 |
| Waranty         | 3 years                     |  |  |                 |

### Technical Features

- Size of printed circuit board (L x W x H): 1000 mm x 8 mm x 2 mm
- Max run length: 8 meters
- Smallest unit of 3/6 LEDs can be cut out at regular intervals without damaging the rest of the product
- Connection possible at the reel end or at the marked cut points
- LM80 approved
- Linear LED tape light on flexible printed circuit board with 3M self-adhesive back
- LM80 approved LED
- 3 year limited warranty
- Up to 50,000 hrs lifetime for Tc<70°C
- UV,IR ray free



## Minimum and Maximum Ratings

| Product  | Operating Temperature at Tc point °C* | Storage Temperature °C * | Voltage Range V DC* | Reverse Voltage V DC* |
|----------|---------------------------------------|--------------------------|---------------------|-----------------------|
| MX-M001A | -20 ~ 70                              | -20 ~ 70                 | 23 ~ 25             | 25                    |
| MX-M002A | -20 ~ 70                              | -20 ~ 70                 | 23~ 25              | 25                    |
| MX-M003A | -20 ~ 70                              | -20 ~ 70                 | 23 ~ 25             | 25                    |
| MX-M004A | -20 ~ 70                              | -20 ~ 70                 | 23~ 25              | 25                    |

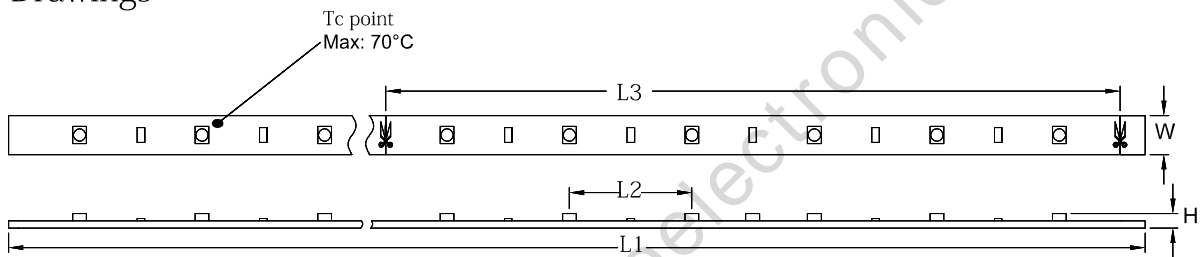
\*) Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the product.

Exceeding maximum ratings for operating voltage will cause hazardous overload and will likely destroy the product.

The temperature of the LED module must be measured at the Tc-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label. For exact location of the Tc-point, please refers to below drawing.

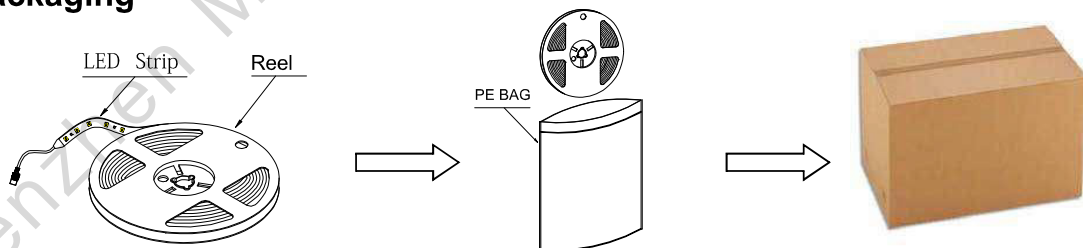
In any condition, if the actual Tc exceed maximum operating temperature at Tc-point 70°C will void all warranties.

## Drawings



| Product  | Whole Length L1 mm | Distance between LEDs L2 mm | Length per unit L3 mm | Width W mm | Height H mm |
|----------|--------------------|-----------------------------|-----------------------|------------|-------------|
| MX-M001A | 5000               | 16.7                        | 100                   | 10         | 2           |
| MX-M002A | 5000               | 8.33                        | 50                    | 10         | 2           |
| MX-M003A | 5000               | 16.7                        | 100                   | 10         | 2           |
| MX-M004A | 5000               | 8.33                        | 50                    | 10         | 2           |

## Packaging



| Product  | Length/Reel M | Quantity/carton Reel | Size of Carton L x W x H mm | Net Weight KG | Gross Weight KG |
|----------|---------------|----------------------|-----------------------------|---------------|-----------------|
| MX-M001A | 5             | 40                   | 510 x 240 x 230             | 4.8           | 5.8             |
| MX-M002A | 5             | 40                   | 510 x 240 x 230             | 4.8           | 5.8             |
| MX-M003A | 5             | 40                   | 510 x 240 x 230             | 4.8           | 5.8             |
| MX-M004A | 5             | 40                   | 510 x 240 x 230             | 4.8           | 5.8             |

## Safety Information

- The LED strip light itself and all its components must not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.

In order to drive LED flexible strip lights safely, it is absolutely necessary to operate them with an electronically stabilized power supply protecting against short circuits, overload and overheating.

To also ease the luminaire/installation approval, electronic control gear, power supply and all electronic accessories for LED or LED modules should carry the CE mark and meet the latest European safety standard.

- Installation of LED flexible strip light (with power supplies) needs to be made with regard to all applicable electrical safety standards. Only qualified personnel should be allowed to perform installations.
- Observe correct polarity!  
Depending on the product incorrect polarity will lead to emission of red or no light. The flexible strip light can be destroyed!
- Parallel connection is highly recommended as safe electrical operation mode.  
Serial connection is not recommended. Unbalanced voltage drop can cause hazardous overload and damage the flexible strip light.
- The maximum run length of products stated in this datasheet is 10m with power feed at one end.
- Pay attention to standard ESD precautions when installing the module.
- Please ensure that the power supply is adequate to operate the flexible strip light.
- The module, as manufactured, has no conformal coating and therefore offers no inherent protection against corrosion. The ability to customize the length of the product by cutting at specifically marked points is a key feature of the product and hence the reason for no factory installed conformal coating. For these reasons, it is recommended that the user complete all products modifications first (cutting wiring) and then apply a conformal coating in the final stage of installations.
- Damage by corrosion will not be honored as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.
- For applications involving exposure to humidity and dust the product must be protected by a fixture or housing with a suitable protecting class. The product can be protected against condensation water by treatment with an appropriate circuit board grade conformal coating. The conformal coating should have the following features:
  - Optical transparency
  - UV-resistance
  - thermal expansion matching the thermal expansion of the product 15-30\*10<sup>-6</sup> cm/cm/K
  - low permeability of steam for all climatic conditions
  - resistance against corrosive environment
- The minimum bending radius is 2 cm. The product has to be mounted on a metal heat sink!
- For outdoor applications, the product has to be mounted on a metal heat sink as well as housing with IP65 rated at least.

## Warranty Information

- MX offers a 3 year limited warranty for products stated in this datasheet from the date of shipment from MX's factory.
- All products are, at the time of shipment, warranted to be free from defects in material and workmanship under normal service and use, provide that installation or renewal is in accordance with manufacturer's instruction.
- If any product fails within the warranty period, and then after MX has verified the allegedly non-complying product(s) and found the said product(s) to be in fact defective within warranty, MX will at its option either furnish a replacement for or issue a credit for the purchasing price of product(s), therefore which proves to be not in compliance with the aforesaid warranty.
- Free replacement(s) supplied under warranty does not extend the original warranty period cover.
- MX does not automatically accept liability for associated or consequential loss of any kind whatsoever, but due consideration will be given in cases where product(s) is confirmed as defective after verification.
- This warranty does not apply to any failures caused by misuse, improper storage, negligence, accident, maladjustment, repair or accessories and devices from other manufacturers.
- This warranty does not cover defects or damages during transportation.
- In any condition, if the actual Tc exceed the maximum allowed working temperature at Tc-point will avoid all warranties.