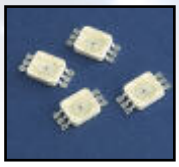
The Optoelectronic Manufacturing Corporation

Side Firing Flexistrip™



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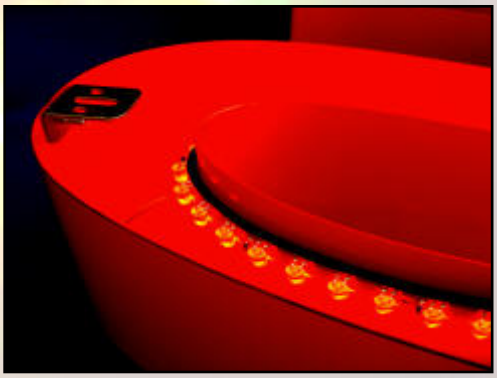
Technical Datasheet

High performance, extreme-versatility 12V DC flexible strips of next generation LEDs designed for industrial, architectural, signage and many other illumination and lighting applications.



Key Features:

- Highly energy efficient 12V DC design
- Industry leading LED density (~12.5mm spacing)
- Compact, low profile and highly flexible
- Very high brightness
- Output characterised for lighting applications
- Front firing version also available
- Up to 2.5 metres can be powered from one end
- Built-in antistatic protection
- Built-in reverse polarity protection
- Cut and link points regularly spaced along strip length
- Can be cut or joined end-to-end to form different lengths
- Low cost LED lighting solution
- Intense, elliptically lensed beam
- RoHS Compliant

Typical Applications:

- Replacement of fluorescent light sources
- Halo and face illumination of built-up letters
- Light box illumination
- Accent lighting
- Backlighting
- Lighting for machinery
- Architectural decorative trims
- Furniture illumination
- Long-life alternative to neon
- Low energy lighting
- Lighting for point-of-sale applications
- Edge-illumination of acrylic lightguides
- Simple and cost-effective LED lighting for almost any application

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Typical electro-optical characteristics at applied voltage = 12V DC and Ta=25°C

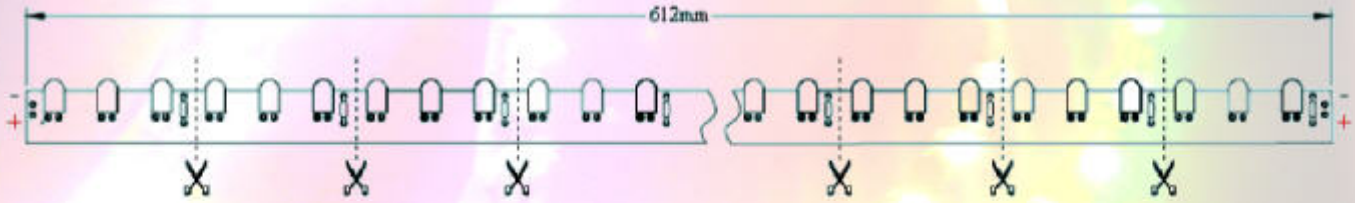
Part no.	LEDs per 400mm strip	Light output per 400mm strip	Beam angle 2θ½	LEDs per meter
SFSW1	48 x Ultrabright White	158 lumens	30°x60°	78
SFSR1	48 x Ultrabright Red	75 lumens	30°x60°	78
SFSG1	48 x Ultrabright Green	76 lumens	30°x60°	78
SFSB1	48 x Ultrabright Blue	43 lumens	30°x60°	78
SFSY1	48 x Ultrabright Amber	71 lumens	30°x60°	78

Colours are for ease of reference only and do not indicate exact shade of LED output.

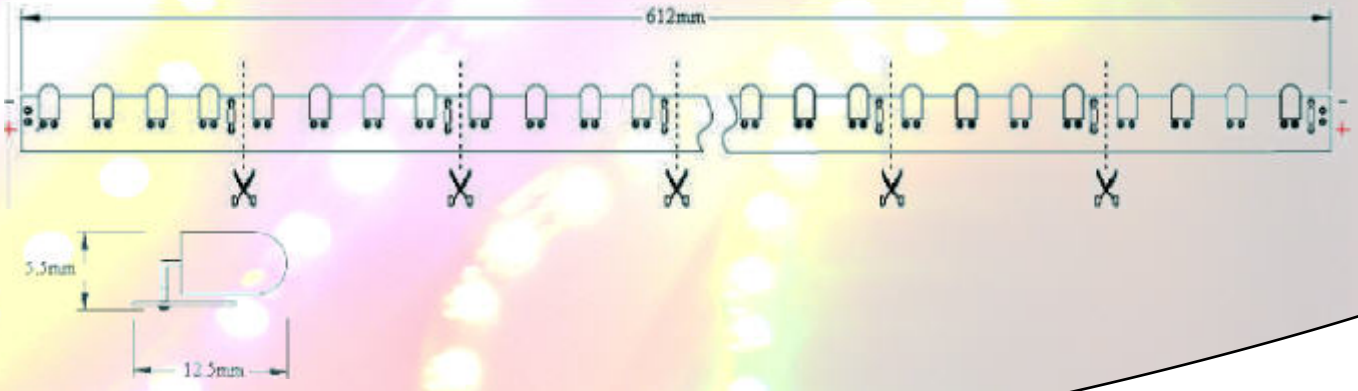
Mechanical information

- Strip length 612mm
- Strip width 12.5mm
- Strip height 5.5mm
- 48 LEDs per 612mm strip
- Cut points every 3 LEDs for white/blue/green, 4 LEDs for yellow/red
- Solder point after each LED
- Solder hole pair at each end for easy end-to-end linking

White, Green, Blue:



Red, Yellow:



Absolute maximum ratings (Ta=25°C where applicable)

Quantity	Rating
Strip Applied Voltage	12V DC
LED Reverse Voltage	5V
Operating Temperature Range	-35°C to +65°C
LED Forward Current	20mA
Temperature Range in Storage	-35°C to +100°C
Strip Forward DC Current	320mA

Application notes

- Do not apply voltages greater than 12V DC to this product or damage may occur.
- Although electrostatic protection is built into this product, as with any semiconductor device it is recommended to avoid unecessary electrostatic discharge.
- Connect supply anode to + solder pad, cathode to - or G solder pad
- For series lengths greater than 2.5m, wiring in a "ring main" style configuration (i.e. a power feed at each end) is strongly recommended to reduce voltage drop. For very long lengths it is recommended to connect a power feed back to the supply after every 8 full strips.
- Cut only at designated cut points, between the resistor and the + solder pad. Do not cut between cut points as this will damage the product.
- Use of a regulated 12V DC supply is recommended.
- Do not expose to moisture unless product has been damp protected.
- Product may be fixed in place using double sided adhesive foam, hot glue or silicone.
- For soldering, use of a small 25W general purpose mains soldering iron is recommended, recommended soldering temperature is 260°C for maximum 5 seconds.

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