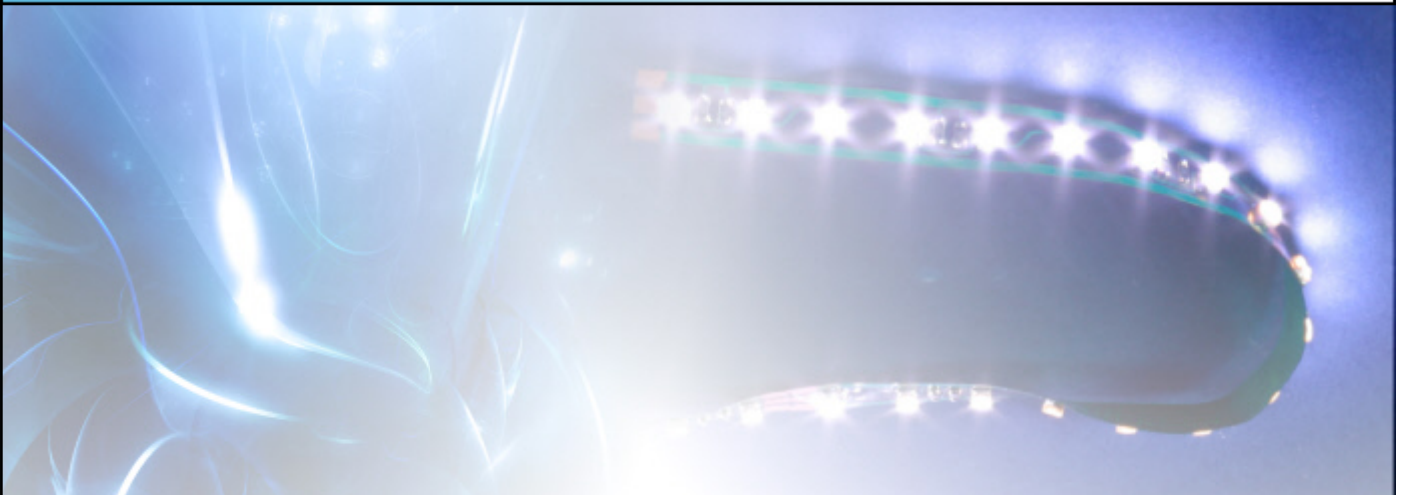
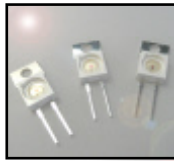
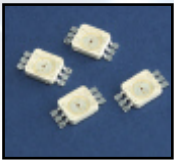




The Optoelectronic Manufacturing Corporation



White and RGB Edge-lit Backlights





Technical Datasheet

Two new emitter options for OMC's long-established range of edge-lit LED backlights. Using our 3mm thick white reflector lightguide, these highly versatile, white and RGB full colour backlights offer design engineers a brand new string to the bow for the illumination of liquid crystal displays as well as other applications such as transparency illumination and photographic equipment.

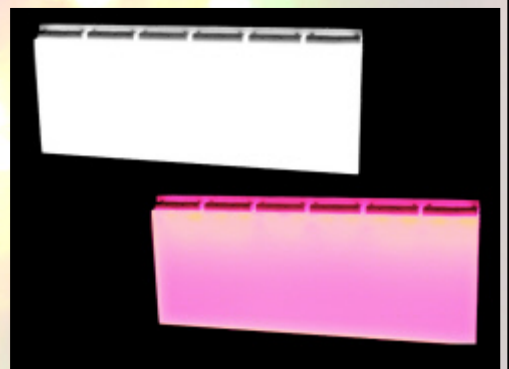
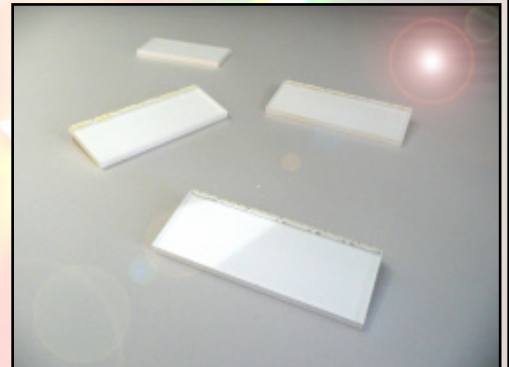
White backlights offer a crisp, fresh look to a modern display, while the full colour RGB version grants design engineers the ability to choose any desired colour or pastel shade simply by changing the drive software, or to convey information such as the level of a measured quantity by changing the backlight hue rather than modifying the LCD image.

Key Features:

- Low cost
- High brightness
- Even illumination - diffused light source
- Vast range of standard sizes
- Easy to interface
- Low current - emitters can be run from as low as 2mA
- High reliability and very long life expectancy
- RGB option allows millions of colours to be produced
- Low electrical noise - no inverters required
- RoHS Compliant

Typical Applications:

- Control equipment
- Instrumentation
- General LCD backlighting
- Transparency illumination
- Illuminated keypads
- Lit static signs
- Photography or CCD component imaging
- Light boxes for signage and point of sale
- Automotive dash displays



Typical Electrical and Mechanical Specifications

S036 Type White Backlight

Number of Emitters: 4

LED Forward Voltage per Emitter:
7V

Max. DC Forward Current
per Emitter: 30mA

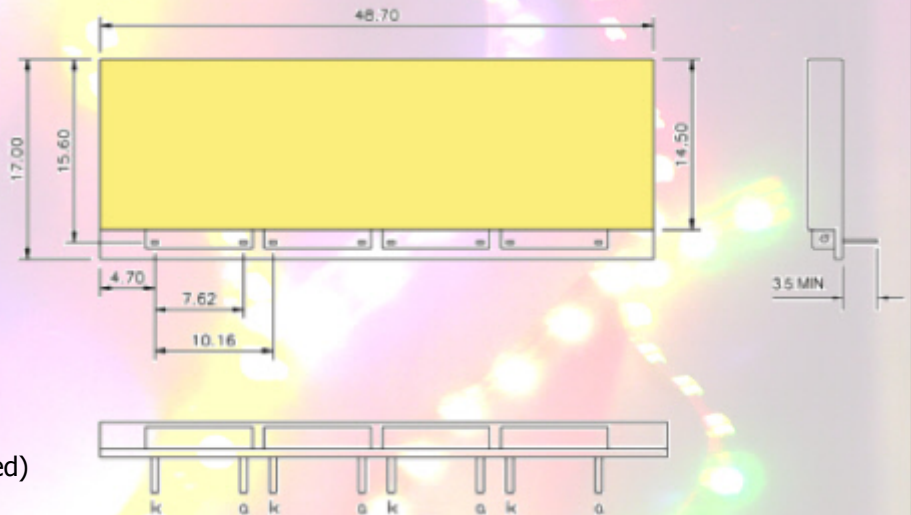
Overall Size:
48.7mm x 17mm x 3mm

Illuminated area:
48.7mm x 14.5mm

All dimensions given in millimetres.
Tolerance: ± 0.3 (unless otherwise stated)

a Denotes anode lead
k Denotes cathode lead

Recommended P.C.B. Hole size: 1.0mm



S037 Type White Backlight

Number of Emitters: 6

LED Forward Voltage per Emitter:
7V

Max. DC Forward Current
per Emitter: 30mA

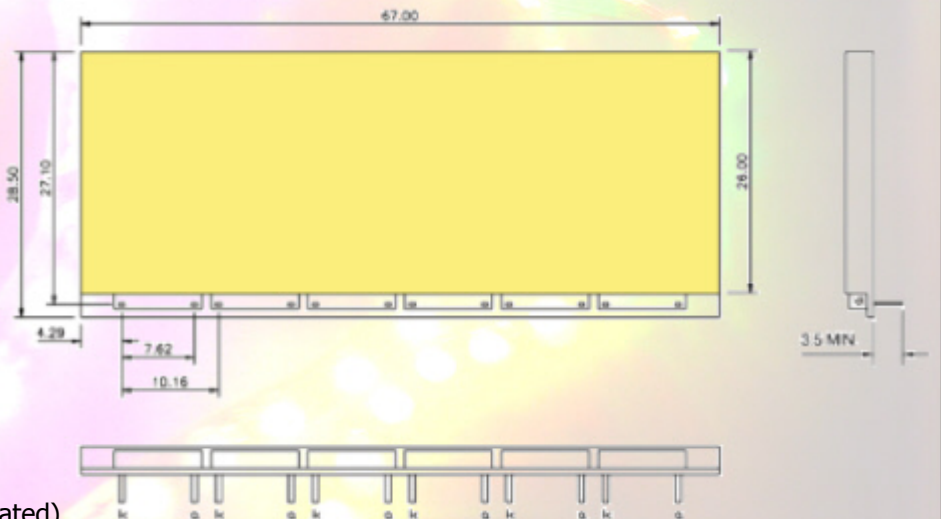
Overall Size:
67mm x 28.5mm x 3mm

Illuminated area:
67mm x 26mm

All dimensions given in millimetres.
Tolerance: ± 0.3 (unless otherwise stated)

a Denotes anode lead
k Denotes cathode lead

Recommended P.C.B. Hole size: 1.0mm



S038 Type White Backlight

Number of Emitters: 4

LED Forward Voltage per Emitter:
7V

Max. DC Forward Current
per Emitter: 30mA

Overall Size:
48.7mm x 23.3mm x 3mm

Illuminated area:
48.7mm x 20.8mm

All dimensions given in millimetres.
Tolerance: ± 0.3 (unless otherwise stated)

a Denotes anode lead
k Denotes cathode lead

Recommended P.C.B. Hole size: 1.0mm



S036 Type RGB Backlight

Number of Emitters: 4

LED Forward Voltage per Emitter:
Red 2.1V, Green & Blue 3.5V

Max. DC Forward Current
per Emitter: 30mA

Overall Size:
48.7mm x 17mm x 3mm

Illuminated area:
48.7mm x 14.5mm

All dimensions given in millimetres.
Tolerance: ± 0.3 (unless otherwise stated)

Recommended P.C.B. Hole size: 1.0mm

Emitter pin pitch 0.1inches



R = Red Anode
G = Green Anode
K = Common Cathode
B = Blue Anode

S037 Type RGB Backlight

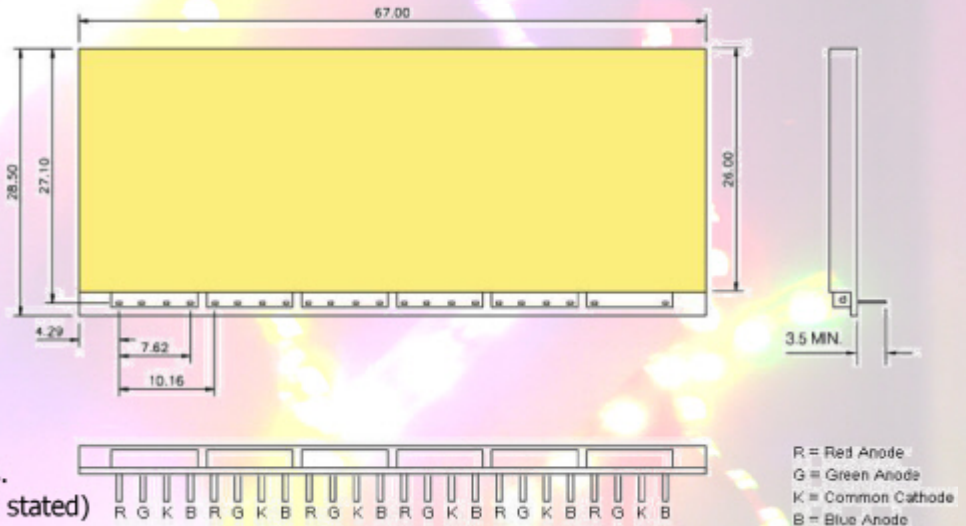
Number of Emitters: 6

LED Forward Voltage per Emitter:
Red 2.1V, Green & Blue 3.5V

Max. DC Forward Current
per Emitter: 30mA

Overall Size:
67mm x 28.5mm x 3mm

Illuminated area:
67mm x 26mm



All dimensions given in millimetres.
Tolerance: ± 0.3 (unless otherwise stated)

Recommended P.C.B. Hole size: 1.0mm

Emitter pin pitch 0.1inches

S038 Type RGB Backlight

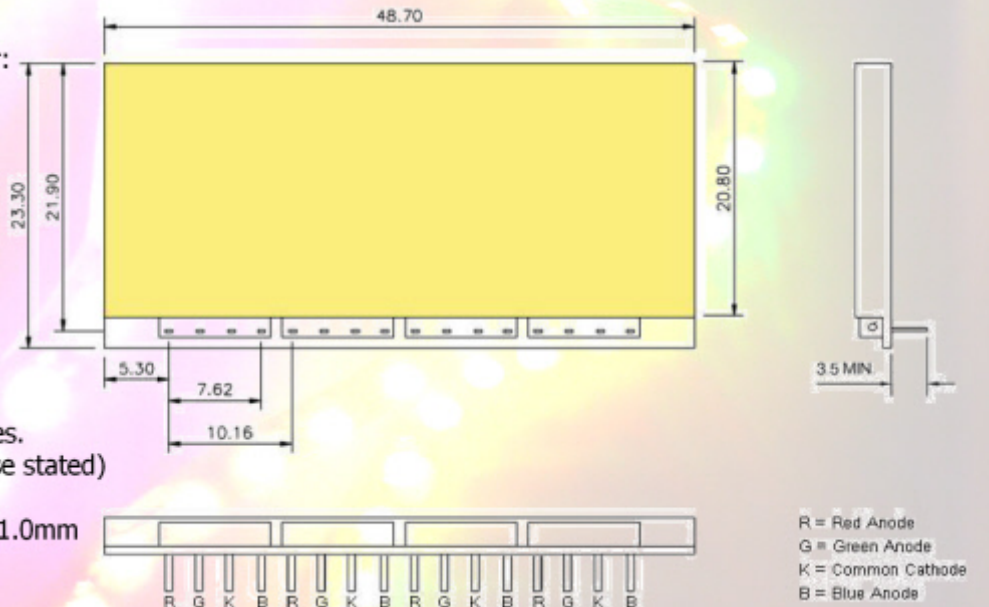
Number of Emitters: 4

LED Forward Voltage per Emitter:
Red 2.1V, Green & Blue 3.5V

Max. DC Forward Current
per Emitter: 30mA

Overall Size:
48.7mm x 23.3mm x 3mm

Illuminated area:
48.7mm x 20.8mm



All dimensions given in millimetres.
Tolerance: ± 0.3 (unless otherwise stated)

Recommended P.C.B. Hole size: 1.0mm

Emitter pin pitch 0.1inches



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