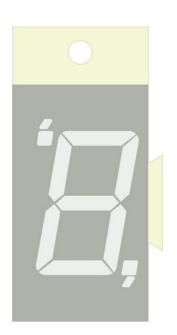
# FEM-080XW4SM0BGWT1 Range

0.80" (20 mm) White Interlocking 7 Segment Display



#### Features:

- High performance white LED display
- Innovative interlocking design to create multi-digit displays from single modules
- Wide viewing angle
- Grey face colour, white segment colour
- Simple connectivity using 2.54mm pitch 10-way Wire-to-Board connector
- Ideal for use in applications such as gaming machines and instrumentation displays



#### Contents:

- Electro / Optical Characteristics Page 2
- Maximum Rated Values Page 2
- Package Outline and Diagrams Page 3

# FEM-080XW4SM0BGWT1 Range

0.80" (20 mm) White Interlocking 7 Segment Display



### Electro / Optical Characteristics $I_F = 5mA$ , Ta = 25°C

| Part Number         |                    | Emitting<br>Colour | Chromaticity<br>Coordinates |      | Forward Voltage |      | Luminous<br>Intensity, lv |     |
|---------------------|--------------------|--------------------|-----------------------------|------|-----------------|------|---------------------------|-----|
| Common Cathode      | Common Anode       |                    | Х                           | У    | Тур             | Max  | Min                       | Тур |
| FEM-0801W4SM0BGWT1◆ | FEM-0802W4SM0BGWT1 | White              | 0.30                        | 0.30 | 3.00            | 3.50 | ~                         | 137 |
| Units               |                    |                    |                             |      | V               |      | mcd / seg                 |     |

<sup>◆</sup> Available from Farnell/element14

#### Note

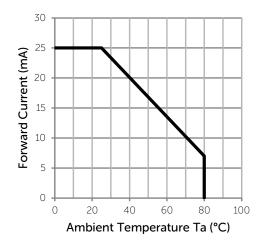
When used in dot intensive applications, it is recommended that the forward current (I<sub>F</sub>) is restricted to 1.25mA DC or 20mA 1/16 duty cycle at 1 kHz pulsed to ensure maximum efficiency over the life of the product.

Industry standard procedures regarding static must be observed when handling white LED displays as they are produced using blue die material.

#### Maximum Rated Values Ta = 25°C (Derate Above 25°C)

| Characteristic             | Condition                       | Symbol           | Rating     | Units |
|----------------------------|---------------------------------|------------------|------------|-------|
| Pulse Forward Current      | 0.1 duty cycle @ 1kHz           | I <sub>FP</sub>  | 100        | mA    |
| DC Forward Current         |                                 | l <sub>F</sub>   | 25         | mA    |
| Reverse Voltage            | $I_R = 10_u A$                  | V <sub>R</sub>   | 5          | V     |
| Operating Temperature      |                                 | T <sub>opr</sub> | -25 to +80 | °C    |
| Storage Temperature        |                                 | $T_{stg}$        | -30 to +85 | °C    |
| Lead Soldering Temperature | 1.6mm from body - max 3 seconds |                  | 260        | °C    |

#### Forward Current Derating Curve

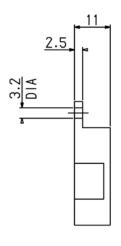


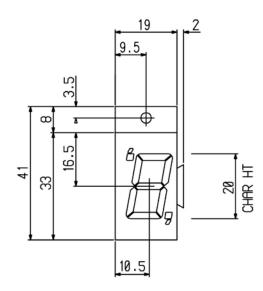
# FEM-080XW4SM0BGWT1 Range

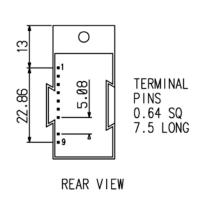
0.80" (20 mm) White Interlocking 7 Segment Display



#### Package Outline and Diagrams

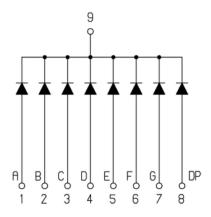




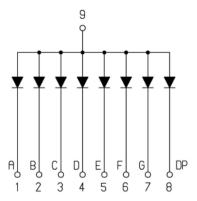


Tolerance  $\pm$  0.25 mm unless stated

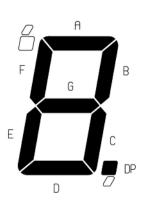
#### Common Cathode



## Common Anode



## Segment Layout



#### Disclaimer

No representation, warranty, responsibility or liability is or will be accepted by Forge Europa Limited in relation to the accuracy or completeness of any information it provides. It is the responsibility of the customer to verify the suitability of the product for its application. All design work supplied by Forge Europa Limited is to be assumed confidential and is the sole property of Forge Europa Limited. It must not be used, copied or disclosed to any third party without the prior written consent of Forge Europa Limited. All contracts are subject to Forge Europa Limited's General Terms and Conditions of Trading which can be found at www.forge-europa.co.uk. E&OE