Meng-8055-B-xx Lighting Housing for COB Modular assembly & introduction

**Features & Benefits**

* Mechanical compatibility with direct mounting of the COB products to the LED thermal body and thermal performance matching the lumen packages.
* For Down light designs from 500 to 1700 lumen.
* Thermal resistance range Rth 2.78°C/W.
* Full accessory kit with LED cooler Body, PSU mounting shrapnel & lens holder.
* Other accessories like COB holder & lens separate available.
* Modular design with mounting holes foreseen for direct mounting of a wide range of LED modules and COB’s.
* Forged from highly conductive aluminum.
* Diameter 80mm - Standard height 55mm, Other heights on request.
* Standard colors Black anodised.

---

**Order Information**

**Example: Meng-8055-B-24**

<table>
<thead>
<tr>
<th>Finish</th>
<th>Beam Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-Black</td>
<td>15°</td>
</tr>
<tr>
<td>C-Clear</td>
<td>24°</td>
</tr>
<tr>
<td>Z-Custom</td>
<td>36°</td>
</tr>
</tbody>
</table>

Notes:
- Mentioned models are an extraction of full product range.
- For specific mechanical adaptations please contact MingfaTech.
- MingfaTech reserves the right to change products or specifications without prior notice.

---

**Notes:**
- Mentioned models are an extraction of full product range.
- For specific mechanical adaptations please contact MingfaTech.
- MingfaTech reserves the right to change products or specifications without prior notice.

---

**Contact Information**

Tel:+86-769-39023131
E-fax:+86-(020)28819702 ext:22122
Email:sales@mingfatech.com
Http://www.heatsinkled.com
Http://www.mingfatech.com

---

**Note:**
- Need to match the 9mm LES COB, The beam Angle will be different.
### Meng Family

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Meng-8055-B-xx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heatsink Size</td>
<td>Φ80×55.0mm</td>
</tr>
<tr>
<td>Beam Angle</td>
<td>15°/24°/36°/60°</td>
</tr>
<tr>
<td>Cut Out</td>
<td>Φ72.0-Φ75.0mm</td>
</tr>
<tr>
<td>Heatsink Material</td>
<td>AL1070</td>
</tr>
<tr>
<td>Heatsink Finish</td>
<td>Black anodised</td>
</tr>
<tr>
<td>Weight</td>
<td>195.0g</td>
</tr>
<tr>
<td>Lamp power (Ths-amb,40°C)</td>
<td>15 (W)</td>
</tr>
<tr>
<td>Thermal Resistance (Rhs-amb)</td>
<td>2.78 (°C/W)</td>
</tr>
</tbody>
</table>

* 3D files are available in ParaSolid, STP and IGS on request

* The thermal resistance Rth is determined with a calibrated heat source of 14mm×14mm central placed on the heat sink, Tamb 40° and an open environment. Reference data @ heat sink to ambient temperature rise Ths-amb 50°C

The thermal resistance of a LED cooler is not a fix value and will vary with the applied dissipated power Pd

* Dissipated power Pd. Reference data @ heat sink to ambient temperature rise Ths-amb 50°C

The maximal dissipated power needs to be verified in function of required case temperature Tc or junction temperature Tj and related to the estimated ambient temperature where the light fixture will be placed

Please be aware the dissipated power Pd is not the same as the electrical power Pe of a LED module

To calculate the dissipated power please use the following formula: Pd = Pe x (1-ηL)

Pd - Dissipated power
Pe - Electrical power
ηL = Light efficiency of the LED module
**Components introduction**

1. Remove the Ring, Install the COB
   Fix the COB by the holder and screw

2. Fix the COB by the Lens and screw

3. Fix the Ring by the Lens and screw

4. Vertically align the shrapnel and press down on the reflector assembly
The thermal data table

<table>
<thead>
<tr>
<th>Dissipated Power Pd(W)</th>
<th>Heat sink to ambient temperature rise Ths-amb(°C/W)</th>
<th>Heat sink to ambient temperature rise Ths-amb(°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3.98</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>3.68</td>
<td>14.8</td>
</tr>
<tr>
<td>6</td>
<td>3.13</td>
<td>17.8</td>
</tr>
<tr>
<td>8</td>
<td>3.14</td>
<td>25.3</td>
</tr>
<tr>
<td>10</td>
<td>3.10</td>
<td>31.5</td>
</tr>
<tr>
<td>12</td>
<td>2.98</td>
<td>36.2</td>
</tr>
<tr>
<td>14</td>
<td>2.75</td>
<td>43.2</td>
</tr>
</tbody>
</table>

* Please be aware the dissipated power Pd is not the same as the electrical power Pe of a LED module.
* To calculate the dissipated power please use the following formula: Pd = Pe x (1-\(\eta_L\)).

\[ Pd = Pe \times (1-\eta_L) \]

\( Pd \) - Dissipated power ; \( Pe \) - Electrical power ; \( \eta_L \) = Light efficiency of the LED module;

* The aluminum substrate side of the package outer shell is thermally connected to the heat sink via TIM (Thermal interface material).

Mingfa recommends the use of a high thermal conductive interface between the LED module and the LED cooler.

Either thermal grease, a thermal pad or a phase change thermal pad thickness 0.1-0.15mm is recommended.

---

*Thermal resistance is a heat property and a measurement of a temperature difference by which an object or material resists a heat flow.

Geometric shapes are different, the thermal resistance is different. Formula: \( \theta = \frac{(Ths - Ta)}{Pd} \)

\( \theta \) - Thermal Resistance [°C/W] ; \( Ths \) - Heatsink temperature ; \( Ta \) - Ambient temperature ;

*The thermal resistance between the junction section of the light-emitting diode and the aluminum substrate side of the package outer shell is \( R_{junction-case} \). the thermal resistance of the TIM outside the package is \( R_{interface} \) [°C/W]. the thermal resistance with the heat sink is \( R_{heatsink-ambient} \) [°C/W], and the ambient temperature is \( T_{ambient} \) [°C].

*Thermal resistances outside the package \( R_{interface} \) and \( R_{heatsink-ambient} \) can be integrated into the thermal resistance \( R_{case-ambient} \) at this point. Thus, the following formula is also used:

\( T_{junction} = (R_{junction-case} + R_{case-ambient}) \times Pd + T_{ambient} \)