Panasonic

Highly efficient reflection package for proximity sensor

Package AAM11 Series for IR LED Module





Individual piece (cut shape)

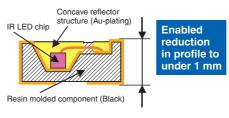
RoHS compliant

FEATURES

1. Realization of small, low-profile reflector package through application of our unique MID* technology (MIPTEC)

Individual piece: $2.3\times1.95\times0.9~\text{mm}$

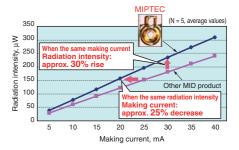
<Cross section of package>



Note: LED chip to be prepared and mounted separately by the customer.

* MID (Molded Interconnect Devices): Molded components with an electrical circuit formed on 3D surfaces.

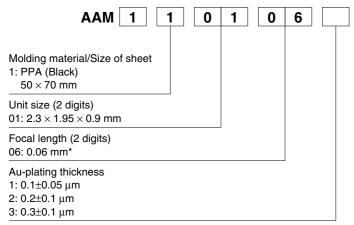
- 2. A concave reflector structure with good directivity and increased light extraction efficiency due to bright plating specifications contributes to decreased module power consumption
- * The graph below uses typical values, and details will vary according to the LED chip specifications.



APPLICATIONS

- 1. Light projection type Inductive proximity sensor package
- Smartphone display control
- Finder control of single-lens reflex
- 2. IR LED lighting for surveillance camera

ORDERING INFORMATION



^{*} For requests of products with different focal lengths, please contact our sales office.

PRODUCT TYPES

| Appearance of sheet | Material of molding sheet | Appearance of individual piece | Focal length | Au-plating thickness (μm) | Part number (Delivered in sheet form) | Packing (one carton) |
|---------------------|--------------------------------|---|---|---------------------------------|---------------------------------------|----------------------------------|
| 50 × 70 mm | Polyphthalamide (PPA) Black | | 0.06 mm Focus | 0.1±0.05 | AAM1101061 | 6 trays (Contains 432 sheets) |
| | | | | 0.2±0.1 | AAM1101062 | |
| | | 2.3 × 1.95 mm h = 0.9 mm (436 pieces/sheet) | Distance from the bottom surface of the mounted LED chip to the focal section | 0.3±0.1 | AAM1101063 | |

Notes: 1. This product is delivered in sheet form, and customers are required to mount the LED chips and cut the sheet into individual pieces.

- 2. For requests of focal lengths other than those mentioned above, please contact our sales office.
- 3. For requests of evaluation samples, please contact our sales office.

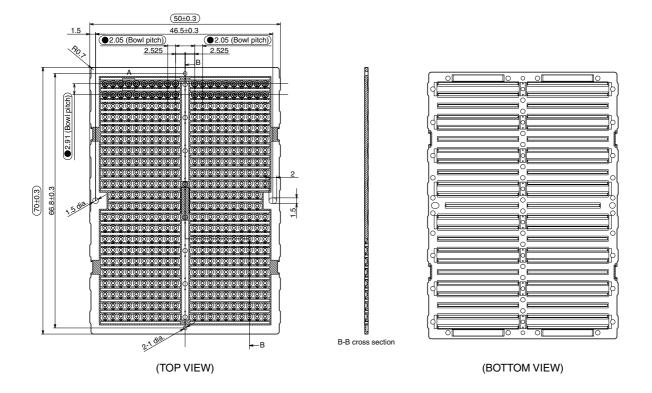
SPECIFICATIONS

Product specifications (Measurement conditions: 25±3°C unless stated otherwise)

| Item | | Specifications | |
|---|-----------------|--|--|
| | Cu-plating | 13±7 μm | |
| | Ni-plating | 6±4 μm | |
| Plating thickness | Au-plating | 0.1±0.05 μm (AAM1101061) 0.2±0.1 μm (AAM1101062) 0.3±0.1 μm (AAM1101063) | |
| | Total thickness | 19±11 μm | |
| Plating adhesion strength (Measurement area refer to product drawing) | | 0.39 N/m or higher (initial) Measured after Au-plating | |
| Ambient environment | Temperature | -20°C to 50°C Maximum temperature when applying an electrical current: 85°C | |
| (No freezing and no dew condensation) | Humidity | 15% to 85%RH | |
| | Pressure | 86 kPa to 106 kPa | |

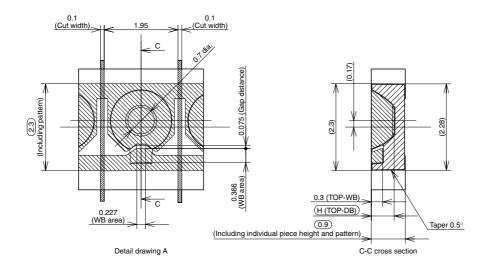
DIMENSIONS (Unit: mm)

1. Sheet dimensions (Delivered form)



-2-

2. Individual piece (cut shape)



General tolerance: ±0.1

NOTES

1. Handling during storage

1) Although the outermost surface is coated in Au-plating, if exposed to atmospheres containing corrosive gases, humidity or at high temperature, the underlying nickel or copper may corrode causing discoloration of the plated surface, decreasing reflectance, and this may lead to decreased mountability or joint reliability of LED components or soldering. Therefore, please pay close attention to the atmosphere used for storage.

2) Storage conditions ("After opening" refers to after opening the packing bag)

The following conditions must be followed in order to maintain plating adhesive strength and external performance.

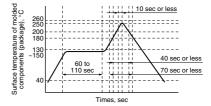
| | Before opening | After opening | |
|-------------------|-------------------|-------------------|--|
| Temperature | 15°C to 35°C | 23°C±3°C | |
| Humidity | RH25% to 75% | RH50% or less | |
| Pressure | 86 kPa to 106 kPa | 86 kPa to 106 kPa | |
| Storage life (*2) | 3 months | 1 month (*1) | |

^{*1:} Please keep it in desiccator set into the clean room.

2. Soldering

Please use the reflow temperature profile conditions recommended below for reflow soldering. Please contact us before using a temperature profile other than that described below.

Recommended soldering temperature conditions



^{*2:} The storage life means the length from the date (lot number) printed on packaging.

Please contact

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