



## СВЕТОДИОДЫ BEELED – ТЕХНИЧЕСКОЕ ОПИСАНИЕ

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Product Type: BLD-HP100UV3-E45

Version No.: 01

### Product Description:

- 100 watt High Power LED
- Colloid Color: Transparent
- Emission Color: Purple
- Chip: 45mil Epileds
- Viewing Angle: 140°

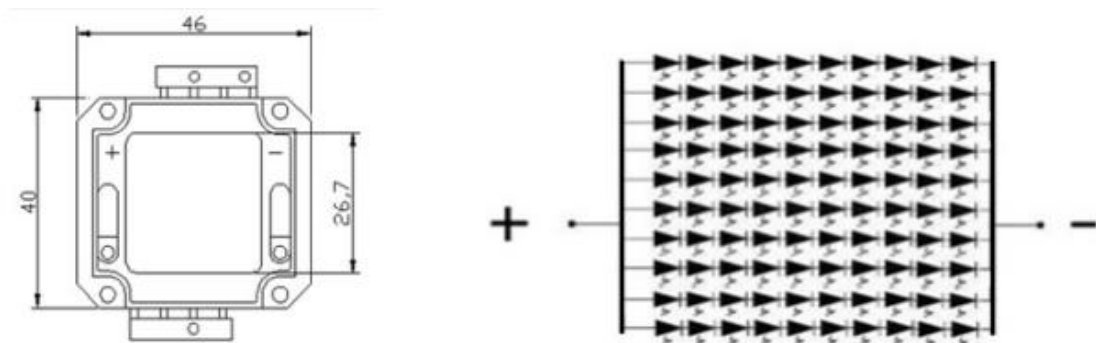
Dice Material: GaInN





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### Outline Drawing



### Notes :

1. All dimensions area in mm tolerance is  $\pm 0.25\text{mm}$  unless otherwise noted.
2. An epoxy meniscus may extend about 1.2mm down the leads.
3. Burr around bottom of epoxy may be 0.5mm max.

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Items                      | Symbol    | Maximum                                                                    | Units            |
|----------------------------|-----------|----------------------------------------------------------------------------|------------------|
| DC Forward Current         | $I_F$     | 3500                                                                       | mA               |
| Peak forward current       | $I_{FP}$  | 4000                                                                       | mA               |
| Reverse Voltage            | $V_R$     | 50                                                                         | V                |
| Power consumption          | $P_D$     | 100                                                                        | W                |
| Operation Temperature      | $T_{opr}$ | $-20 \sim +75$                                                             | $^\circ\text{C}$ |
| Storage Temperature        | $T_{stg}$ | $-30 \sim +80$                                                             | $^\circ\text{C}$ |
| Lead Soldering Temperature | $T_{sol}$ | Max $260^\circ\text{C}$ for 5 sec Max.<br>(3mm from the base of the body ) |                  |

\* Pulse width  $\leq 0.1\text{msec}$  duty  $\leq 1/10$



## СВЕТОДИОДЫ BEELED – ТЕХНИЧЕСКОЕ ОПИСАНИЕ

### Product Optical Properties (Ta = 25°C)

| Item                     | Symbol                       | Conditions            | Min   | Averag     | Max  | Units         |
|--------------------------|------------------------------|-----------------------|-------|------------|------|---------------|
| Forward Voltage          | $V_F$                        | $I_F = 3500\text{mA}$ | 30    | $e_{----}$ | 34   | V             |
|                          | $V_F$                        | $I_F = 4000\text{mA}$ | 30    | -----      | 34   | V             |
| Reverse current          | $I_R$                        | $V_R = 50\text{V}$    | ---   | -----      | 100  | $\mu\text{A}$ |
| Peak Wavelength          | $\lambda_p$                  | $I_F = 3500\text{mA}$ | 380   | -----      | 390  | nm            |
| Chromaticity Coordinates | X                            | $I_F = 3500\text{mA}$ | ----- | -----      | ---  | ----          |
|                          | Y                            | $I_F = 3500\text{mA}$ | ----- | -----      | ---- | ----          |
| Luminous Flux            | $I_V$                        | $I_F = 3500\text{mA}$ | 700   | ----       | 800  | lm            |
| 50% power Angle          | $2\theta^{1/2}_{\text{H-H}}$ | $I_F = 3500\text{mA}$ | ---   | 70         | ---  | deg           |
|                          | $2\theta^{1/2}_{\text{V-V}}$ | $I_F = 3500\text{mA}$ | ----  | ---        | ---  | deg           |

### Absolute Maximum Ratings

| Parameter                | Symbol | Rating  | Unit |
|--------------------------|--------|---------|------|
|                          |        | Purple  |      |
| DC Forward Current(mA)   | If     | 3500    | mA   |
| Peak Pulse Current(mA)   | If     | 4000    | mA   |
| Reverse Voltage          | VR     | 50      | V    |
| LED Junction Temperature | Tj     | 125     | °C   |
| Operation Temperature    | Topr   | -20--65 | °C   |
| Storage Temperature      | Tstg   | -20--70 | °C   |
| Soldening Temperature    | Tsol   | 260     | °C   |
| ESD Sensitivity          | Vb     | 4000    | V    |