



## СВЕТОДИОДЫ BEELED – ТЕХНИЧЕСКОЕ ОПИСАНИЕ

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Product Type: BLD-HP005IR920-E42

Version No.: 01

### Product Description:

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

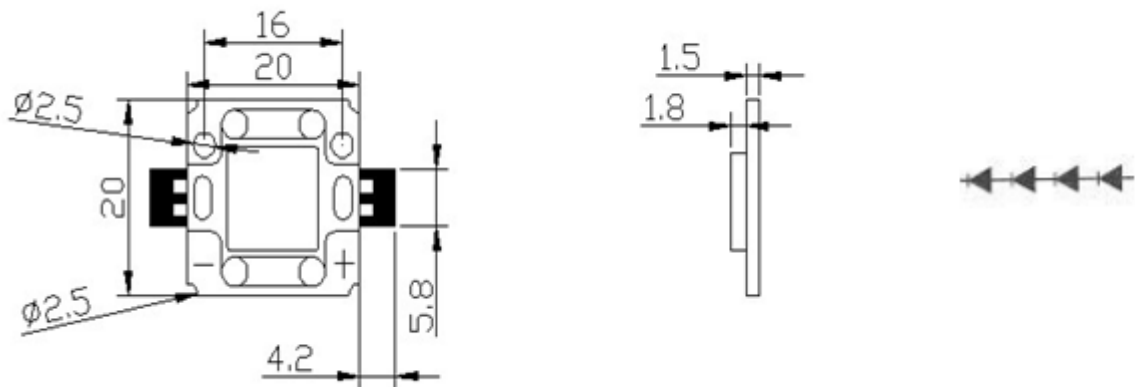
Dice Material: GaInN





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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 (Ta = 25°C)

| Items                      | Symbol    | Maximum                                                      | Units |
|----------------------------|-----------|--------------------------------------------------------------|-------|
| DC Forward Current         | $I_F$     | 350                                                          | mA    |
| Peak forward current       | $I_{FP}$  | 600                                                          | mA    |
| Reverse Voltage            | $V_R$     | 20                                                           | V     |
| Power consumption          | $P_D$     | 5                                                            | W     |
| Operation Temperature      | $T_{opr}$ | -20~+75                                                      | °C    |
| Storage Temperature        | $T_{stg}$ | -30~+80                                                      | °C    |
| Lead Soldering Temperature | $T_{sol}$ | Max 260°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          | $V_F$                        | $I_F=350\text{mA}$ | 5.0   | ----   | 5.5  | V             |
|                          | $V_F$                        | $I_F=600\text{mA}$ | 5.0   | ----   | 5.5  | V             |
| Reverse current          | $I_R$                        | $V_R=20\text{V}$   | ---   | -----  | 10   | $\mu\text{A}$ |
| Peak Wavelength          | $\lambda_p$                  | $I_F=400\text{mA}$ | 920   | -----  | 930  | nm            |
| Chromaticity Coordinates | X                            | $I_F=350\text{mA}$ | ----- | -----  | ---  | ----          |
|                          | Y                            | $I_F=350\text{mA}$ | ----- | -----  | ---- | ----          |
| Luminous Flux            | $I_V$                        | $I_F=350\text{mA}$ | 0.01  | ----   | 0.05 | lm            |
| 50% power Angle          | $2\theta^{1/2}_{\text{H-H}}$ | $I_F=350\text{mA}$ | ---   | 70     | ---  | deg           |
|                          | $2\theta^{1/2}_{\text{V-V}}$ | $I_F=350\text{mA}$ | ----  | ---    | ---  | deg           |

### Absolute Maximum Ratings

| Parameter                | Symbol | Rating   | Unit |
|--------------------------|--------|----------|------|
|                          |        | Infrared |      |
| DC Forward Current(mA)   | If     | 350      | mA   |
| Peak Pulse Current(mA)   | If     | 600      | mA   |
| Reverse Voltage          | VR     | 5        | 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    |