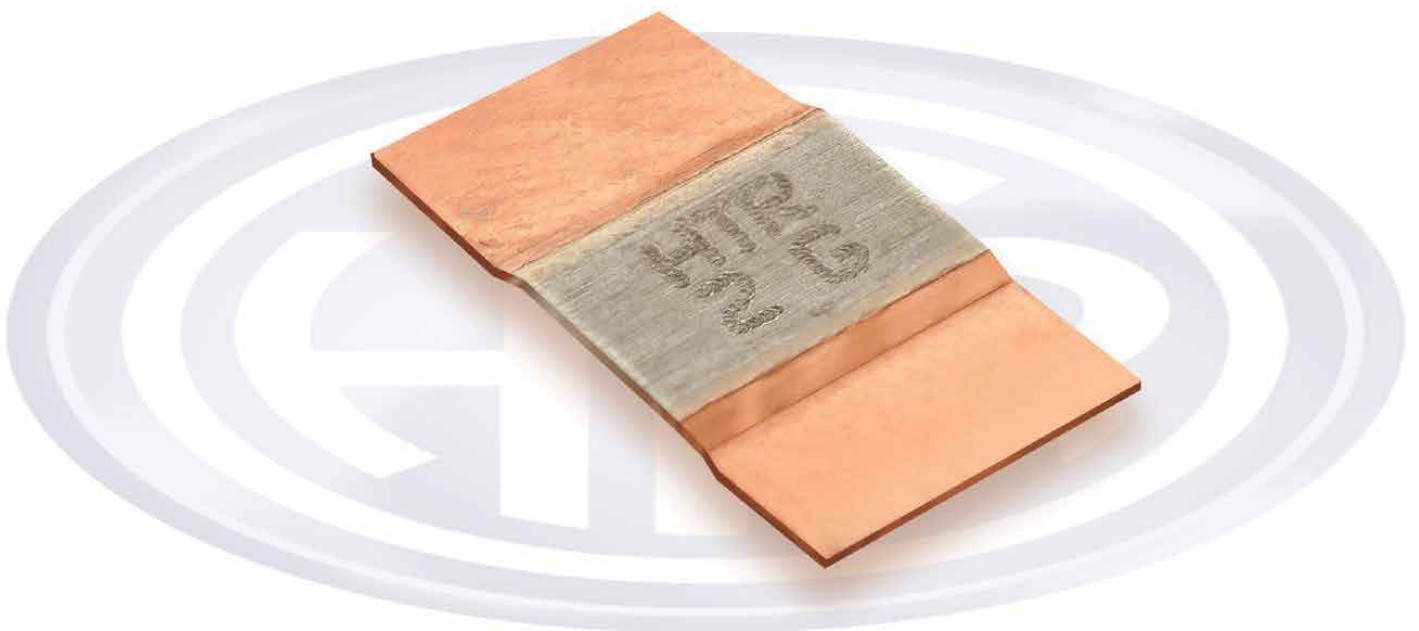




**LOW OHM POWER  
RESISTORS**

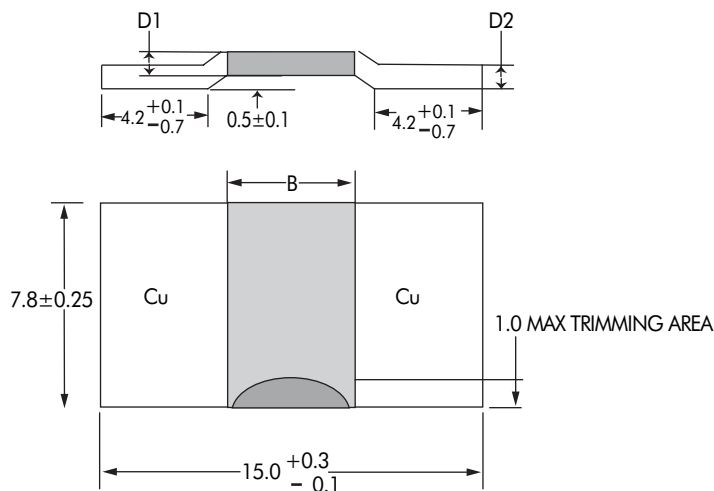
**HEE  
SERIES**

- Open frame electron beam welded punched out type.
- 4 to 10W.
- R0002 to R002.





## PHYSICAL CONFIGURATION



## DIMENSIONAL TABLE

| SR NO. | HI-TECH PART NAME | RESISTIVE MATERIAL  | B (MM)          | D1 (MM)           | D2 (MM)           | TYPICAL WT. PER PC (gms) |
|--------|-------------------|---------------------|-----------------|-------------------|-------------------|--------------------------|
| 1      | HEE10W* R0002 G   | MANGNIN             | 5.0 (+0.2/-0.3) | 1.42 (+0.1/-0.05) | 1.42 (+0.1/-0.05) | 1.60                     |
| 2      | HEE7W* R0003 G    | MANGNIN             | 5.0 (+0.2/-0.3) | 0.94 (+0.1/-0.05) | 0.94 (+0.1/-0.05) | 1.10                     |
| 3      | HEE7W* R0005 G    | ALUCHROM / FeCr8020 | 5.0 (+0.2/-0.3) | 1.63 (+0.1/-0.05) | 1.63 (+0.1/-0.05) | 1.62                     |
| 4      | HEE6W* R0005 G    | MANGNIN             | 5.0 (+0.2/-0.3) | 0.56 (+0.1/-0.05) | 0.56 (+0.1/-0.05) | 0.61                     |
| 5      | HEE6W* R001 G     | ALUCHROM / FeCr8020 | 5.0 (+0.2/-0.3) | 0.91 (+0.1/-0.05) | 0.91 (+0.1/-0.05) | 0.90                     |
| 6      | HEE5W* R0006 G    | MANGNIN             | 5.0 (+0.2/-0.3) | 0.48 (+0.1/-0.05) | 0.48 (+0.1/-0.05) | 0.53                     |
| 7      | HEE4W* R002 G     | ISAOHM / FeCr8020   | 5.0 (+0.2/-0.3) | 0.44 (+0.1/-0.05) | 0.44 (+0.1/-0.05) | 0.44                     |

## TECHNICAL INFORMATION

- 1) Ideal for Current sense and High Current application.
- 2) Sulfur free copper connection.
- 3) Max. Solder temp. upto 350 ° C

## ELECTRICAL AND ENVIRONMENTAL CHARACTERISTICS

| PARAMETER / PERFORMANCE TEST & TEST METHOD   | PERFORMANCE REQUIREMENTS   |
|--|--|
| <b>Power Rating</b> (Rated Ambient Temperature)  | Full power dissipation at 85° C and linearly derated to zero at + 140° C |
| <b>Insulation</b>  | Not Insulated  |
| <b>Resistance Tolerance</b>  | ±2% (Available upto ±1%)   |
| <b>Temperature Range</b>   | - 55° C to +170° C   |
| <b>Voltage Rating / Limiting Voltage / Max. Working Voltage</b>  | $\sqrt{P \times R}$  |
| <b>Short time Overload</b> (5 x Rated Power for 5 Secs.)   | $\Delta R \pm [ 1.25 \% + R0005 ]$                                       |
| <b>Resistance Temperature Characteristics</b>  | <100 ppm/°K (Depanding on Resistance Value)                              |
| <b>Damp Heat</b> (Steady State)<br>(40°C at 93 % R.H. for 1000 Hrs. – no load applied)                       | $\Delta R \pm [ 0.5 \% + R0005 ]$ – Average                              |
| <b>Endurance – Load Life</b> [ 70°C with limiting voltage<br>– 1.5 hours on / 0.5 hours off for 1000 hours ] | $\Delta R \pm [ \leq 2.75 \% + R0005 ]$ – Average                        |

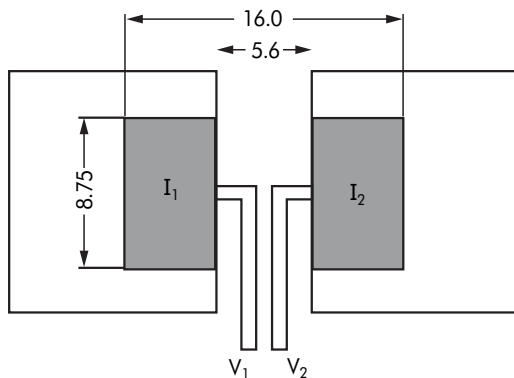
## MECHANICAL SPECIFICATIONS

| PARAMETER / PERFORMANCE TEST & TEST METHOD               | PERFORMANCE REQUIREMENTS                    |
|--|---|
| <b>Resistance to Soldering heat</b> - (350° for 30 Secs) | $\Delta R \pm [ 0.2 \% + R0005 ]$ – Typical |
| <b>Solderability</b> ( As per IEC pub. 60068-2-20 )      | Must meet the requirements laid down        |



LOW OHM  
POWER  
RESISTORS  
**HEE**

## RECOMENDED PCB LAYOUT



## PRINTING / MARKING

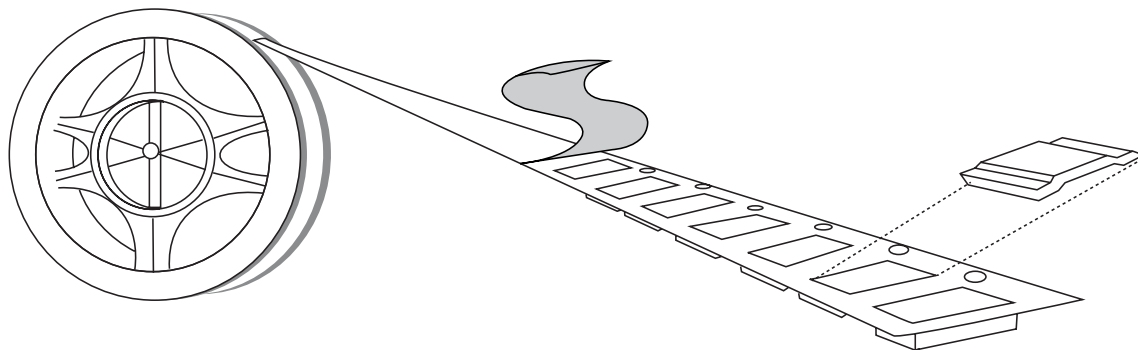
Marking in milliohms

Eg. Marking for HEE6W\* R001 G will be HTR 1 G

## A. PACKAGING

Resistors shall be packed in sealed plastic packets with silica gel pouch placed in small cardboard cartons (Type 'I' Box) of approximate size 70mmx70mmx70mm - 1000pcs. & such 4 Boxes packed in (Type 'A' Box) of approximate size 200mmx150mmx70mm & 8 Boxes in (Type 'B' Box) of approximate size 295mmx140mmx80mm. & such 36 Boxes of Type 'I' or 6 Boxes of Type 'A' packed in Master Carton of approximate size 320mmx245mmx245mm.

## B. TAPE & REEL PACKING



| SPECIFICATION | TAPEWIDTH | PARTS PER REEL |
|---------------|-----------|----------------|
| EIA-481-D     | 24mm      | 2000 pcs       |

Storage Condition (Packed) : Temp 25°C to 35°C, Humidity 30 to 80% RH, Shelf life-6 months

Floor Life (Unpacked) : Temp 25°C to 35°C, Humidity 30 to 80% RH, Flore life-15 days