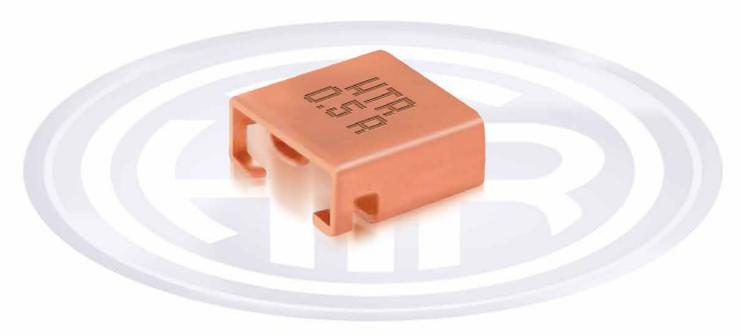


#### **LOW OHM POWER RESISTORS**

## **HBE**

• Open frame electron beam welded punched out type.
• 2W to 5W.
• R0005 to R005.



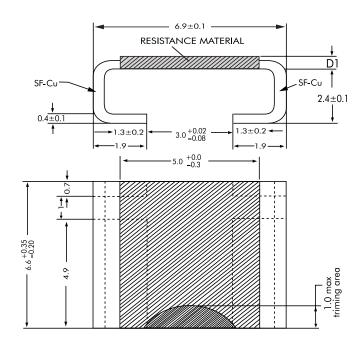


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POWER RESISTORS

**HBE** 

#### **PHYSICAL CONFIGURATION**



#### **DIMENSIONAL TABLE**

SR NO.	HI-TECH PART NAME	RESISTIVE MATERIAL	D1 (MM)	TYPICAL WT. PER PC (GMS)
1	HBE5W* R0005 G	ZERANIN30	0.45 ± 0.10	0.45
2	HBE5W* R001 G	MANGNIN	0.33 ± 0.10	0.30
3	HBE5W* R002 G	ISAOHM/FeCr8020	0.55 ± 0.10	0.45
4	HBE3W* R003 G	MANGNIN	0.36 ± 0.10	0.27
5	HBE2W* R005 G	MANGNIN	0.36 ± 0.10	0.27

#### **TERMINATION**

- 1) Ideal for Current sense and High Current application.
- 2) Sulfer free copper connection.
- 3) Max solder temp. upto  $350^{\circ}$

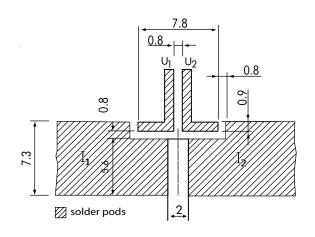
#### **ELECTRICAL AND ENVIRONMENTAL CHARACTERISTICS**

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	
Insulation	Not Insulated	
Resistance Tolerance	±2% (Available upto ±1%)	
Temperature Range	- 55° C to +170° C	
Voltage Rating / Limiting Voltage / Max. Working Voltage	√PxR	
<b>Short time Overload</b> (5 x Rated Power for 5 Secs.)	ΔR ± [ 1.25 % + R0005 ]	
Resistance Temperature Characteristics	<100 ppm/°K [depending on resistance value]	
Damp Heat (Steady State ) (40°C at 93 % R.H. for 1000 Hrs. – no load applied )	ΔR ± [ 0.5 % + R0005 ] – Average	
<b>Endurance – Load Life</b> [ 70°c with limiting voltage – 1.5 hours on / 0.5 hours off for 1000 hours ]	ΔR ± [ ≤2.75 % + R0005 ] − Average	

#### **MECHANICAL SPECIFICATIONS**

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

#### **RECOMMENDED PCB - LAYOUT**



### LOW OHM POWER RESISTORS HBE

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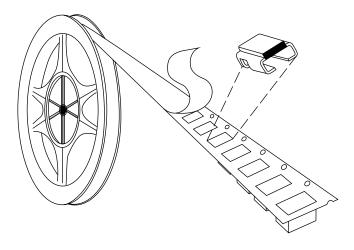
#### **PRINTING / MARKING**

Marking in milliohms. Eg. For HBE5W\* R0005  $\pm$  2% marking will be HTR 0.5

#### 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 - 500pcs. & 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	16mm	1400 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.