

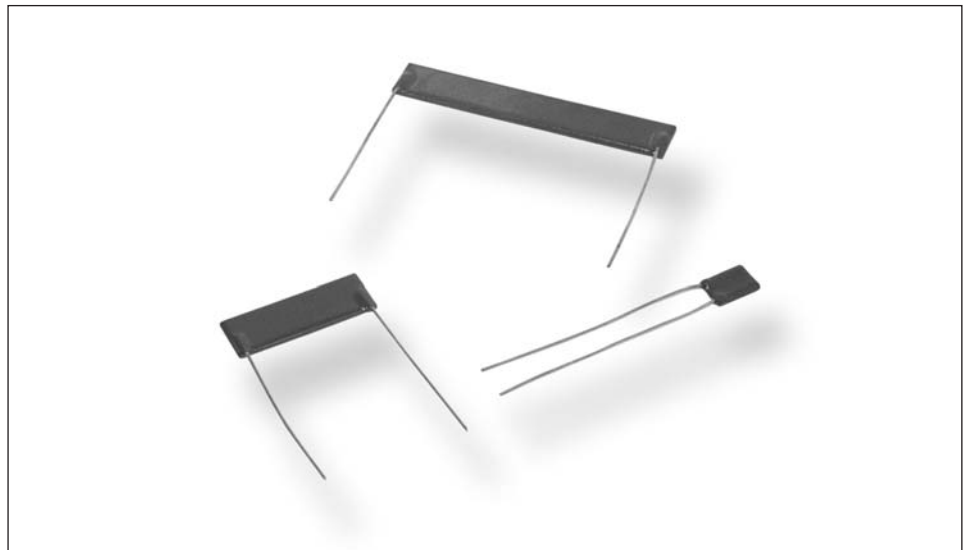
Type HB Series

Key Features

- Up to 15kV Element Voltage
 - Unique specification for the most demanding applications
- High Ratio of Size to Power
 - The solution to your PCB population problems
- 1kW to 1GW
 - Coupled with 1% tolerance gives ultimate design flexibility
- Established Product with Proven Reliability
- Low Inductance
 - For the fastest switching speeds

Applications

- High Voltage
- Voltage Divider
- Surge
- Filter
- Balancing
- Inrush Limiting



TE Connectivity (TE) is a leading supplier of standard and custom designed high value/high voltage resistors for high voltage, industrial, control, medical and general-purpose use. The HB is a tough epoxy coated high voltage resistor, with axial or radial leads, values up to 1G Ohm and an operational voltage to 20kV as standard and 30kV to order. The resistors are made from quality materials for optimum reliability and stability. TE can test resistors to conform to relevant international, MIL or customer specifications. TE is happy to advise on the use of resistors for high frequency applications and to supply information for high voltage use.

Characteristics - Electrical

| | HBA | HB1 | HB3 |
|--|---|---------------------|------------------------------------|
| Power Dissipation - Power @ 20°C (W): | 0.8 | 2.0 | 4.0 |
| @ 70°C: | 0.4 | 1.0 | 2.0 |
| Ohmic Value - Min (Ohms): | 1K | 10K | 10K |
| Max: | 120M | 1G | 1G |
| Resistance Tolerance (%) (Tighter By Request): | 1%, 2%, 5% | 1%, 2%, 5% | 1%, 2%, 5% |
| Maximum Working Voltage - DC or ACrms (Volts): | 1kV | 7.5kV | 15kV |
| Insulation Resistance - Epoxy Coated, @500V dc (Ohms): | >10 ⁹ MΩ | >10 ⁹ MΩ | >10 ⁹ MΩ |
| Load Stability - 1000hr's @ 70°C (%): | ±0.5% | ±0.5% | ±0.5% |
| Temp. Rapid Change - -55°C to 125°C for 5 cycles (ΔR): | ±0.1% | ±0.1% | ±0.1% |
| Endurance - 1000 Hours @ 200°C (ΔR): | ≤2% | ≤2% | ≤2% |
| Resistance to Soldering Heat - 350°C for 3.5seconds (ΔR): | 0.05% | 0.05% | 0.05% |
| Temperature Coefficient (ppm/°C): | ±100ppm/°C | ±100ppm/°C | ±100ppm/°C |
| (±20ppm/°C available to special order) | | | |
| Voltage Coefficient: | Negligible up to 100K | | Negligible up to 200K |
| | Increasing to 0.02ppm/Volt at 800K | | Increasing to 0.01ppm/Volt at 1M0 |
| | Increasing to 1.0ppm/Volt at 5M0 | | Increasing to 1.0ppm/Volt at 10M |
| | Increasing to 2.0ppm/Volt at 50M | | Increasing to 2.0ppm/Volt at 100M |
| | Increasing to 8.0ppm/Volt at 1000M | | Increasing to 8.0ppm/Volt at 1000M |
| Ambient Temperature Range (°C): | -55 to 125 | -55 to 125 | -55 to 125 |
| Long Term Damp Heat (%): | 0.25% | 0.25% | 0.25% |
| (Steady state 56 Days 95% RH at 40°C) | | | |
| Noise (Quantech) Dependent on Resistor Type and Value: | -20dB (0.1μ V/V) at lower values +10dB (3.3μ V/V) at higher values | | |
| Encapsulation: | Epoxy coating (Optional) | | |
| Solvent Resistance: | Print will withstand the action of all commonly used industrial solvents. | | |
| Lead Material: | Tinned copper wire | | |
| Lead Length: | Minimum 20mm | | |
| Lead Diameter: | Nominal 0.6 ± 0.05mm | | |

Type HB Series

Dimensions - Type HBA, HB1 & HB3 (Radial)



Type HB1 & HB3 (Axial)

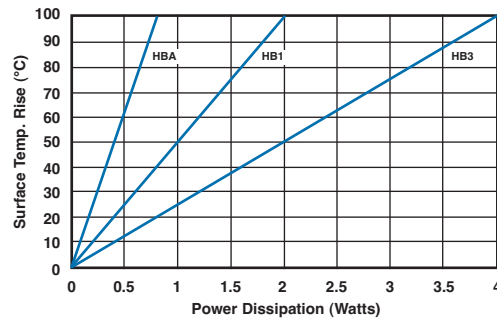


| Type | | A | B | C | D | E | F | G | H | I |
|------|--------------|------|------|------|------|------|------|------|-----|-----|
| HBA | Uncoated | 10.2 | 7 | 1.75 | 60.2 | 5.0 | - | - | - | - |
| | Epoxy Coated | 12.5 | 8 | 2.6 | 60.5 | 5.0 | - | - | - | - |
| HB1 | Uncoated | 8.4 | 26 | 1.5 | 33.8 | 22.9 | 26 | 66 | 1.5 | 8.4 |
| | Epoxy Coated | 10.4 | 26.5 | 3.0 | 35.8 | 22.9 | 26.3 | 66 | 3 | 9.2 |
| HB3 | Uncoated | 8.4 | 51.1 | 1.5 | 33.8 | 48.3 | 51.1 | 91.1 | 1.5 | 8.4 |
| | Epoxy Coated | 10.4 | 52 | 3.0 | 35.8 | 48.3 | 53.5 | 91.1 | 3 | 9.6 |

Derating Curve



Surface Temperature Rise



How to Order

| HB | 3 | 1K0 | J | Z | R | E |
|--|----------------------------------|---|----------------------------|---------------------------------|---|------------------------|
| Common Part | Power Rating @ 70°C | Resistance Value | Tolerance | Temp. Coefficient of Resistance | Lead Style | Coating Styles |
| HB- High Value / High Voltage Resistor | A - 0.4W 1 - 1.0W 3 - 2.0W | 1Kohm (1000Ω) 1K0 1Mohm (1000000Ω) 1M0 | F - 1% G - 2% J - 5% | Z - 100ppm | R - Radial Leads A - Axial Leads (HB1, HB3 only for Axial Leads) | E - Epoxy Blue Coating |

TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks. Other logos, product and Company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this datasheet, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this datasheet are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкуренспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: org@lifeelectronics.ru