

Precision – High Value Chip Resistors

Features Precision high value chip resistors offer extremely high resistance – up to 1 Giga Ohm, with low TCR. They exhibit excellent long term stability and can be used in high voltage applications.

Specifications



DERATING CURVE



| Series | TCR | Maximum Temperature Coefficient (PPM) | Range of Resistance Values | | Rated Power (W) | Maximum Working Voltage DC (KV) | Voltage Coefficient (PPM/V) | Dimensions (mm) | | | | | Available Resistance Tolerance (%) |
|------------|-----|---------------------------------------|----------------------------|-----------|-----------------|---------------------------------|-----------------------------|-----------------|----------|----------|----------------|----------------|----------------------------------------------------------------------------|
| | | | (MΩ) Min. | (MΩ) Max. | | | | L | W | T | l ₁ | l ₂ | |
| PHCR 2512 | E | ± 25 | 0.5 | 30 | 0.5 | 1.5 | < 20 | 6.4 ±0.2 | 3.2 ±0.2 | 0.5 ±0.1 | 0.5 ±0.3 | 0.5 ±0.3 | For values ≤100MΩ B±0.1 C±0.25 D±0.5 F±1 G±2 J±5 K±10 |
| | C | ± 50 | 0.5 | 30 | | | | | | | | | |
| | K | ± 100 | 0.5 | 1000 | | | | | | | | | |
| PHCR 5020 | E | ± 25 | 1 | 30 | 1.0 | 2.5 | < 5 | 12.8 ±0.2 | 5.0 ±0.2 | 0.8 ±0.1 | 1.0 ±0.1 | 2.0 ±0.2 | For values ≤1GΩ F±1 G±2 J±5 K±10 |
| | C | ± 50 | 1 | 30 | | | | | | | | | |
| | K | ± 100 | 1 | 1000 | | | | | | | | | |
| PHCR 7020 | K | ± 100 | 1 | 1000 | 1.5 | 3.5 | < 2 | 18.0 ±0.2 | 5.0 ±0.2 | 0.8 ±0.1 | 1.0 ±0.1 | 2.0 ±0.2 | For values ≤1GΩ F±1 G±2 J±5 K±10 |
| PHCR 10020 | K | ± 100 | 1 | 1000 | 2.0 | 5.0 | < 1 | 25.5 ±0.2 | 5.0 ±0.2 | 0.8 ±0.1 | 1.0 ±0.1 | 2.0 ±0.2 | For values ≤1GΩ F±1 G±2 J±5 K±10 |

*Consult your sales representative for the resistors with resistance values which are outside the range specified above and with resistance tolerance between 0.1% and 0.25%.

All components in this section are RoHS compliant per the EU directives and definitions.

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Characteristics

| Item | Characteristics | Test Method |
|------------------------------|----------------------|---------------------------------------------------|
| Operating Temperature Range | -55°C ~ + 150°C | |
| Temperature Coefficient | ±25, ±50, ±100PPM/°C | Measured at 25°C and 125°C |
| Long-term Stability | ± 0.1% | At normal temperature and humidity for 10,000 hr. |
| Moisture Resistance | ± 0.1% | 40°C 90 ~ 95% R.H. 1000 hr. |
| Heat Cycle | ± 0.1% | -55°C ~ + 150°C 5 cycles |
| Resistance to Soldering Heat | ± 0.1% | 260°C ± 5°C 10 sec. |

How To Order

