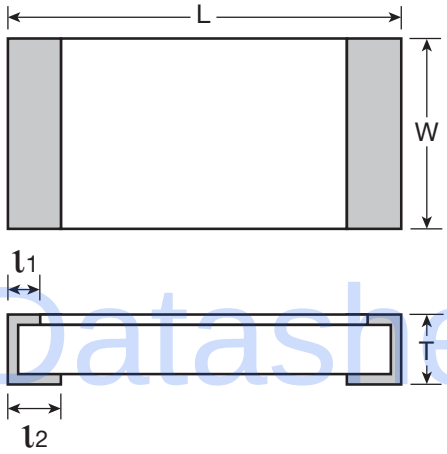
Precision – High Value Chip Resistors

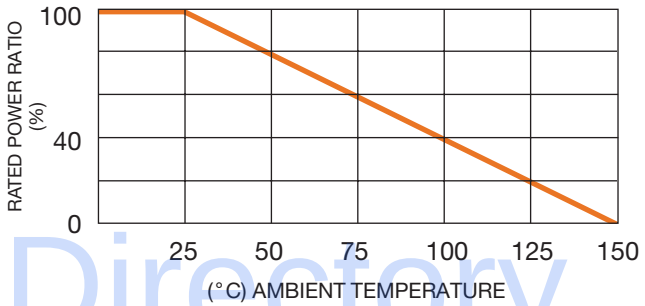
Features

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 (MΩ) Min.	Range of Resistance Values (MΩ) Max.	Rated Power (W)	Maximum Working Voltage DC (KV)	Voltage Coefficient (PPM/V)	Dimensions (mm) L	W	T	l1	l2	Available Resistance Tolerance (%)
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	
	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	

*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

PHCR2512 — XXX (X) F C T

SERIES

RESISTANCE VALUE
E-24 Values (3 digits): The first two digits represent significant figures.
The last specifies the number of zeros to follow. (eg. 507 — 500Meg Ω)

E-96 Values (4 digits): The first three digits represent significant figures.
The last specifies the number of zeros to follow. (eg. 4754 — 4.75Meg Ω)

TOLERANCE AT 25°C
B: ± 0.1%
C: ± 0.25%
D: ± 0.5%
F: ± 1%
G: ± 2%
J: ± 5%
K: ± 10%

TCR
E: ± 25PPM/°C
C: ± 50PPM/°C
K: ± 100PPM/°C

PACKAGING
B: BULK
T: TAPE

Standard termination finish for this product is 100% matte Tin (Sn)

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