



HPC-SERIES

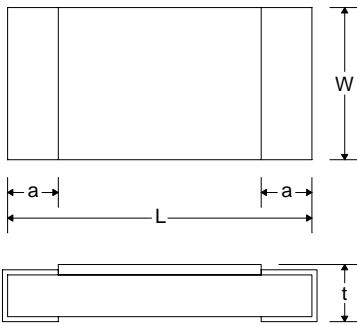
HIGH VALUE PRECISION CHIP RESISTOR

PRECISION RESISTIVE PRODUCTS, INC.
 202 MACK LANE, MEDIAPOLIS, IA 52637
 (319)394-9131 FAX (319)394-9280
 E-Mail info@prpinc.com
 PRP HOME PAGE <http://www.prpinc.com>

- Ultra High Ohmic Values
- Standard Industry Case Sizes 0603, 0805 & 1206
- High Alumina Substrate
- Nickel Barrier Terminations
- 90/10 Solder Plated Terminations
- Packaging is Tape & Reel
- Wrap-Around Termination

Dimensions Inches (mm) [Suggested Pad Layouts](#)

Style	L	W	t	a
HPC 0603	0.063 ±0.004 (1.6 ±0.1)	0.031 ±0.004 (0.8 ±0.1)	0.020 ±0.004 (0.5 ±0.1)	0.008 ±0.004 (0.2 ±0.1)
HPC 0805	0.079 ±0.006 (2.0 ±0.15)	0.049 ±0.006 (1.25 ±0.15)	0.020 ±0.006 (0.5 ±0.15)	0.016 ±0.010 (0.4 ±0.25)
HPC 1206	0.126 ±0.006 (3.2 ±0.15)	0.063 ±0.006 (1.6 ±0.15)	0.024 ±0.006 (0.6 ±0.15)	0.020 ±0.010 (0.5 ±0.25)



Rated Dissipation / Voltage

Style	Resistance Range (Ω)	Rated Dissipation (W)	Voltage Max. Working	Voltage Max. Overload
HPC 0603	1M to 50M	1/32	50	100
HPC 0805	1M to 50M	1/16	75	150
HPC 1206	1M to 50M	1/8	150	300

Available in E24 Values

Standard EIA Decade Table

E24 Values

1.0	3.3
1.1	3.6
1.2	3.9
1.3	4.3
1.5	4.7
1.6	5.1
1.8	5.6
2.0	6.2
2.2	6.8
2.4	7.5
2.7	8.2
3.0	9.1

Temperature Coefficient / Resistance Tolerance

Style	T.C.R. PPM/°C	Resistance Range	Resistance Tolerance @25°C
		E-24	
HPC 0603	±100	1M ~ 50M	±1%, ±2%, ±5%
HPC 0805	±100	1M ~ 50M	±1%, ±2%, ±5%
HPC 1206	±100	1M ~ 50M	±1%, ±2%, ±5%



Performance Data

Load Life	1000 Hrs. @ 70°C	$\Delta R \pm(3.0\% + .01\Omega)$
Humidity	1000 Hrs. @ 60°C 90~95%RH	$\Delta R \pm(2.0\% + .01\Omega)$
Temperature Cycle	5 Cycles -55°C to 125°C	$\Delta R \pm(1.0\% + .01\Omega)$
High Temp. Operation	1000 Hrs. @ 125°C	$\Delta R \pm(0.5\% + .01\Omega)$
Low Temp. Operation	1000 Hrs. @ -55°C	$\Delta R \pm(1.0\% + .01\Omega)$
Short Time Overload	2.5 X Rated Voltage 5 Sec.	$\Delta R \pm(0.5\% + .01\Omega)$
Effects of Soldering Heat	10 Sec. @ 270°C	$\Delta R \pm(0.5\% + .01\Omega)$
Operating Temperature Range is - 55°C to +125°C		

Derating Curve

For resistors operated in ambient above 70°C, power dissipation must be derated in accordance with curve in Figure 1.

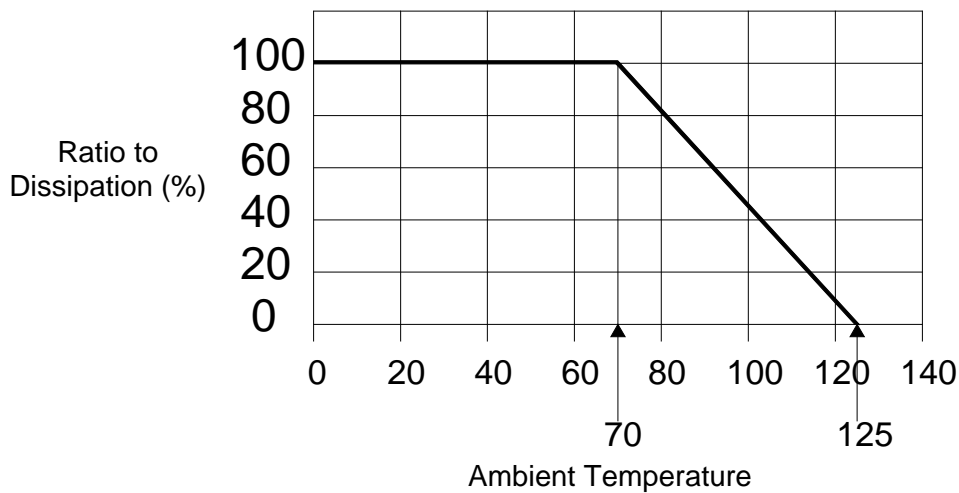
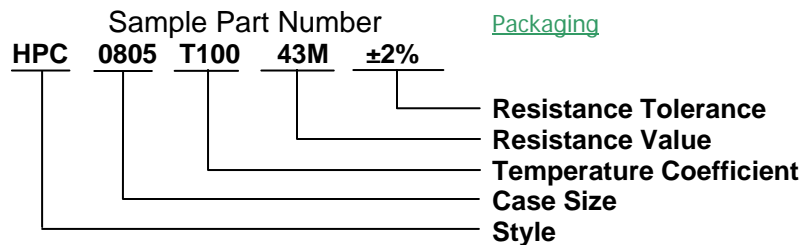


Figure 1

How to Order

[Standard Decade Values](#)

[Packaging](#)



Add "T" at the end of the Case Size portion of the part number for lead free termination.