

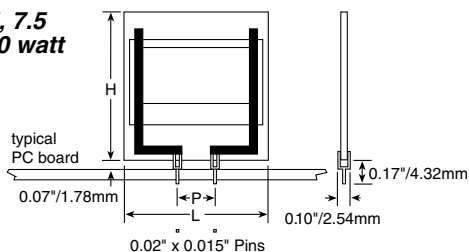
# TA Series

Power Chip®

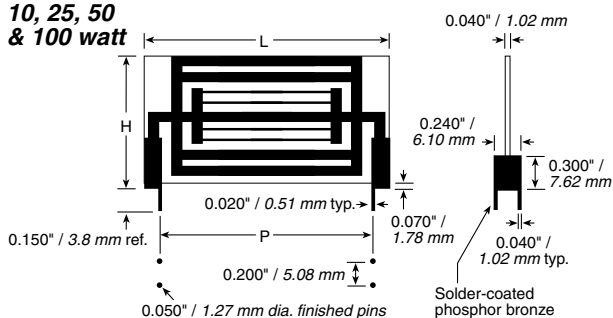
Thick Film on Alumina Substrate



3, 5, 7.5 & 10 watt



10, 25, 50 & 100 watt



Ohmite's original Power Chip resistors feature our thick film on alumina substrate technology. These planar packages yield space saving, 10W/in<sup>2</sup> power densities that require over 50% less board space than other radial packages. Convection cooling is maximized by the planar package configuration which dissipates heat well above board level.

Ohmite's power chip resistors have a 125% higher operating temperature range than competitive product of similar design. High temperature solder and in-process plating keep terminations secure under self-heating effects by preventing re-flow from full power operation.

Flexible packaging schemes make these resistors ideal for power supplies, audio amplifiers, video fly-back, and other power control applications.

## SPECIFICATIONS

### Material

**Substrate:** Alumina

**Resistor:** Thick Film

**Coating:** Glass

**Terminals:** Solder Plated Phosphor Bronze

**Thermal Conductivity:** 20 Watts/Meter/°C

### Temperature Coefficient:

1 ohm 450 ppm/°C  
1 to 100Ω 100 ppm/°C  
101Ω and up 50 ppm/°C

### Electrical

**Tolerance:** ±1%, ±5% and ±10%

**Power Rating:** Based on 25°C free air

**Resistance Range:** 0.25 ohm to 10M ohm. Consult factory for other values

**Maximum Operating Voltage:** 350 VAC, 500 VDC through glass, 1000 VAC, 1500 VDC through substrate

**Overload:** Five times rated power, as long as the one second average dissipation does not exceed the wattage rating.

ΔR: ±2%, 2000 hours

### Derating:

100% @ 25°C to 0% @ 180°C ambient.

## FEATURES

- High-Temp Terminal Construction
- Wide Resistance Range
- Low Inductance (50nH-100nH)
- High Power Density
- Easy to install. PC-mountable

Dimensions (±.020 in. / ±.508mm)				
Series	Wattage	P	Length L	Height H
TA203	3.0	0.200 / 5.08	0.50 / 12.70	0.60 / 15.24
TA303	3.0	0.300 / 7.62	0.50 / 12.70	0.60 / 15.24
TA205	5.0	0.200 / 5.08	0.50 / 12.70	1.00 / 25.40
TA305	5.0	0.300 / 7.62	0.50 / 12.70	1.00 / 25.40
TA605	5.0	0.600 / 15.24	1.00 / 25.40	0.50 / 12.70
TA805	5.0	0.800 / 20.32	1.00 / 25.40	0.50 / 12.70
TA207	7.5	0.200 / 5.08	0.75 / 19.05	1.00 / 25.40
TA307	7.5	0.300 / 7.62	0.75 / 19.05	1.00 / 25.40
TA310	10.0	0.300 / 7.62	1.00 / 25.40	1.00 / 25.40
TA810	10.0	0.800 / 20.32	1.00 / 25.40	1.00 / 25.40
TA025	25.0	1.90 / 48.3	2.220 / 56.39	1.170 / 29.70
TA050	50.0	1.90 / 48.3	2.220 / 56.39	2.270 / 57.60
TA100	100.0	4.10 / 104.1	4.420 / 112.27	2.270 / 57.60

### ORDERING INFORMATION

Pin spacing  
(on 3-10W models only)

2 = .2"  
3 = .3"  
8 = .8"

Tolerance

K = 10%  
J = 5%  
F = 1%

RoHS compliant

## TA305PA4K50JE

Series	Power Rating:	Package:	Resistance Value (Ω)
03 = 3 W	PA = pin terminals, std. for 3-10 W	PA = pin terminals, std. for 3-10 W	R250 = 0.25
05 = 5	07 = 7.5	PW = wraparound, std. for 10-100 W	10R0 = 10.0
10 = 10	025 = 25		2K00 = 2,000
050 = 50	100 = 100		45K0 = 45,000

Check product availability at [www.ohmite.com](http://www.ohmite.com)

## STANDARD PART NUMBERS FOR TA SERIES

Ohmic value	Part Number										Ohmic value	Part Number										Ohmic value	Part Number											
	Part No. Prefix Suffix	TA203PA	TA303PA	TA205PA	TA305PA	TA207PA	TA310PA	TA810PW	TA025PW	TA050PW		TA100PW	Part No. Prefix Suffix	TA203PA	TA303PA	TA205PA	TA305PA	TA207PA	TA310PA	TA810PW	TA025PW		TA050PW	TA100PW	Part No. Prefix Suffix	TA203PA	TA303PA	TA205PA	TA305PA	TA207PA	TA310PA	TA810PW	TA025PW	TA050PW
0.25	R250J	+	✓	✓	✓	✓	✓	✓	✓	✓	50.00	50R0J	+	+	+	+	+	+	+	+	+	+	2,500.00	2K50J	✓	✓	+	✓	✓	✓	✓	✓	✓	✓
1.00	1R00J	+	+	+	+	+	+	+	+	+	62.00	62R0J	✓	✓	+	✓	✓	✓	✓	✓	✓	✓	3,000.00	3K00J	✓	✓	+	✓	✓	+	✓	✓	✓	✓
1.50	1R50J	+	+	+	+	+	+	+	+	+	68.00	68R0J	✓	✓	+	✓	✓	✓	✓	✓	✓	✓	4,000.00	4K00J	✓	✓	+	✓	✓	+	✓	✓	✓	✓
2.00	2R00J	+	+	+	+	+	+	+	+	+	75.00	75R0J	✓	✓	+	✓	✓	✓	✓	✓	✓	✓	4,700.00	4K70J	✓	✓	+	+	+	+	✓	✓	✓	✓
4.70	4R70J	✓	✓	+	+	+	+	+	+	+	100.00	100RJ	+	+	+	+	+	+	+	+	+	+	5,000.00	5K00J	✓	✓	+	+	+	+	+	+	+	+
5.00	5R00J	+	+	+	+	+	+	+	+	+	150.00	150RJ	✓	+	+	+	+	+	+	+	+	+	5,100.00	5K10J	✓	✓	+	+	+	+	+	+	+	+
5.10	5R10J	✓	✓	✓	✓	✓	✓	✓	✓	✓	200.00	200RJ	+	+	+	+	+	+	+	+	+	+	7,500.00	7K50J	✓	✓	+	+	+	+	+	+	+	+
7.50	7R50J	✓	✓	✓	✓	✓	✓	✓	✓	✓	250.00	250RJ	✓	✓	+	✓	✓	✓	✓	✓	✓	✓	10,000.00	10K0J	+	✓	+	+	+	+	+	+	+	+
8.20	8R20J	✓	✓	+	+	+	+	+	+	+	270.00	270RJ	✓	✓	+	✓	✓	✓	✓	✓	✓	✓	15,000.00	15K0J	✓	✓	+	+	+	+	+	+	+	+
10.00	10R0J	+	+	+	+	+	+	+	+	+	300.00	300RJ	+	+	+	+	+	+	+	+	+	+	18,000.00	18K0J	✓	+	+	+	+	+	+	+	+	+
11.00	11R0J	✓	✓	+	+	+	+	+	+	+	470.00	470RJ	+	+	+	+	+	+	+	+	+	+	20,000.00	20K0J	✓	✓	+	+	+	+	+	+	+	+
12.00	12R0J	+	+	+	+	+	+	+	+	+	500.00	500R	+	+	+	+	+	+	+	+	+	+	30,000.00	30K0J	✓	✓	+	+	+	+	+	+	+	+
15.00	15R0J	+	+	+	+	+	+	+	+	+	620.00	620RJ	✓	✓	+	✓	✓	✓	✓	✓	✓	✓	39,000.00	39K0J	✓	✓	+	+	+	+	+	+	+	+
20.00	20R0J	+	+	+	+	+	+	+	+	+	680.00	680RJ	✓	✓	+	✓	✓	✓	✓	✓	✓	✓	50,000.00	50K0J	✓	✓	+	+	+	+	+	+	+	+
24.00	24R0J	✓	✓	+	+	+	+	+	+	+	1,000.00	1K00J	+	+	+	+	+	+	+	+	+	+	75,000.00	75K0J	✓	✓	+	+	+	+	+	+	+	+
27.00	27R0J	+	+	+	+	+	+	+	+	+	1,500.00	1K50J	✓	✓	+	+	+	+	+	+	+	+	100,000	100KJ	+	+	+	+	+	+	+	+	+	+
33.00	33R0J	✓	✓	✓	✓	✓	✓	✓	✓	✓	1,800.00	1K80J	✓	✓	+	✓	✓	✓	✓	✓	✓	✓	150,000	150KJ	+	+	+	+	+	+	+	+	+	+
47.00	47R0J	+	+	+	+	+	+	+	+	+	2,000.00	2K00J	+	+	+	+	+	+	+	+	+	+	200,000	200KJ	✓	+	+	+	+	+	+	+	+	+