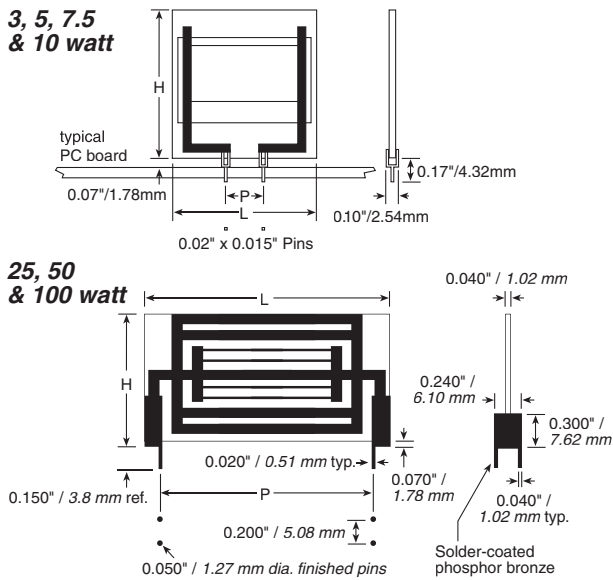


TA Series

Power Chip® Resistors Thick Film on Alumina Substrate



Ohmite's original Power Chip resistors are designed from our thick film on alumina substrate technology. These planar packages yield space saving, 10W/in² 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% and ±5% (other tolerances available)

Power Rating: Based on 25°C free air

Resistance Range: 0.5 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% @ 350°C.

FEATURES

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

Series	Wattage	Dimensions (in. / mm)		
		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%

E = RoHS compliant
 Available Jan. 2006

TA305PA4K50JE

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

STOCK PART NUMBERS FOR STANDARD RESISTANCE VALUES

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	500J	+	+	+	✓	✓	✓	✓	✓	✓	✓	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	✓	✓	+	✓	✓	✓	✓	✓	✓	✓