

Ohmite Power Chip Resistors are thick film on alumina oxide substrates with copper plated silver conductors, Ruthenium oxide resistance material, and a glass passivation layer.

These resistors offer very low inductance (50nh measured at 1MHz) and outstanding power density (10W/in²). Repetative transient capability is 5 times rated power as long as one second average dissipation remains equal to or less than the free air rating.

SPECIFICATIONS

MATERIAL

- Substrate:** 96% Al₂O₃
- Resistor:** Ruthenium Oxide
- 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
 - 101 to 10KΩ 50 ppm/°C
 - 10KΩ and up 100 ppm/°C

ELECTRICAL

- Tolerance:** ±1% and ±5% (other tolerances available)
- Power Rating:** Based on 25°C free air with linear derating to 0 watts at 350°C.
- 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

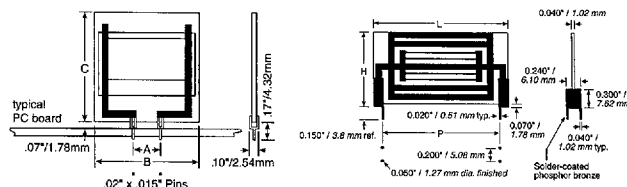
FEATURES

- **Wide resistance range (0.10 - 250KΩ) *0.05Ω on special order basis**
- **Low inductance**
- **High Power Density**
- **Easy to install. PC-mountable**

TA Series

Power Chip® Resistors

Thick Film on Alumina Substrate

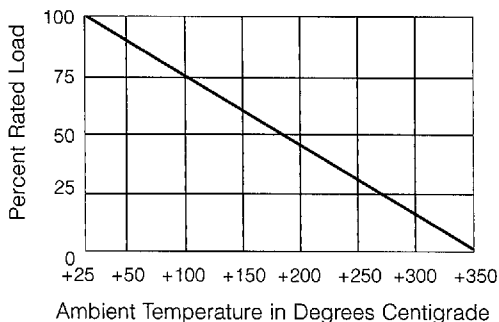


3, 5, 7½, & 10 Watt

25, 50, and 100 Watt

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
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

LINEAR DERATING



ORDERING INFORMATION

TA	3	05	PA	4K50	J
Series	Pin Spacing* on 3-10 Watt Models	Power Rating*	Package Modifier	Ohm Value	Tolerance
	2 = 0.2"	03 = 3 Watts	PA=pin terminals (Std on 3-10w)	R250 = .25	F = 1%
	3 = 0.3"	05 = 5 Watts	PW=wraparound terminals (Std on 25-100w)	10R0 = 10	J = 5%
	8 = 0.8"	07 = 7.5 Watts		2K00 = 2,000	K = 10%
		10 = 10 Watts		45K0 = 45,000	

*Note: Use all 3 spaces for power rating on 25.50 and 100 W models. TA025 = 25W, TA050 = 50W, TA100 = 100W.

STOCK PART NUMBERS FOR STANDARD RESISTANCE VALUES

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