

TA Series



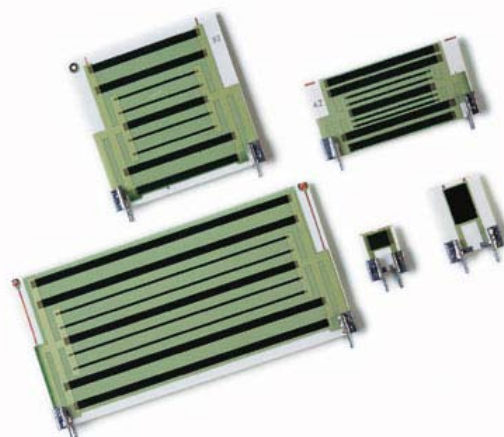
Power Chip® Thick Film on Alumina Substrate

HIGH
POWER

Ohmite's original Power Chip resistors feature 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.



FEATURES

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

SERIES SPECIFICATIONS

Series	Wattage	Series	Wattage	Series	Wattage	Series	Wattage	Series	Wattage
TA203	3.0	TA205	5.0	TA207	7.5	TA310	10.0	TA025	25.0
TA303	3.0	TA305	5.0	TA307	7.5	TA810	10.0	TA050	50.0
		TA605	5.0					TA100	100.0
		TA805	5.0						

CHARACTERISTICS

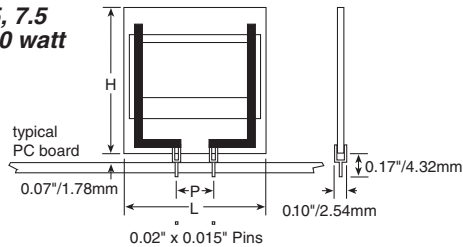
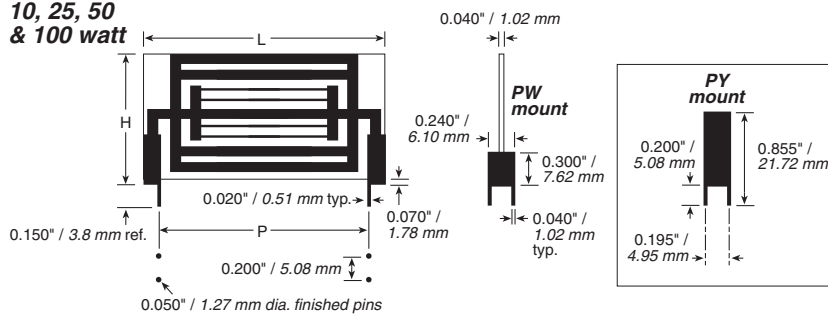
Substrate	Alumina
Resistor	Thick Film
Coating	Glass
Terminals	Solder Plated Phosphor Bronze
Thermal Conductivity	20 Watts/Meter/°C
Temperature Coefficient	1 ohm: 450 ppm/°C 1 to 100Ω: 100 ppm/°C 101Ω and up: 50 ppm/°C
Tolerance	±1%, ±5% and ±10%
Power Rating	Based on 25°C free air
Resistance Range	0.25 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.

TA Series

Power Chip®
Thick Film on Alumina SubstrateHIGH
POWER

DIMENSIONS

(±.020 in. / ±.508mm)

3, 5, 7.5
& 10 watt10, 25, 50
& 100 watt

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

*PW version of 310 and 810 are L=1.085"/27.56mm

ORDERING INFORMATION

Pin spacing (on 3-10W models only)		Tolerance		RoHS compliant
2 = .2"		K = 10%		
3 = .3"		J = 5%		
8 = .8"		F = 1%		

Series	Power Rating:	Package:	Resistance Value (Ω)
TA	03 = 3 W	PA = pin terminals,	R250 = 0.25
3	05 = 5	std. for 3-10 W	10R0 = 10.0
0	07 = 7.5	PW = wraparound,	2K00 = 2,000
5	10 = 10	std. for 10-100 W	45K0 = 45,000
P	025 = 25	PY = high-stability	
A	050 = 50	wraparound	
4	100 = 100		
K			
5			
0			
J			
E			

Standard part numbers for ta series

Ohmic value	Part No. Prefix > Suffix >	Part Number	Ohmic value	Part No. Prefix > Suffix >	Part Number	Ohmic value	Part No. Prefix > Suffix >	Part Number
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	—560	✓	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	✓

+ = Most popular standard values, ✓ = Stock values