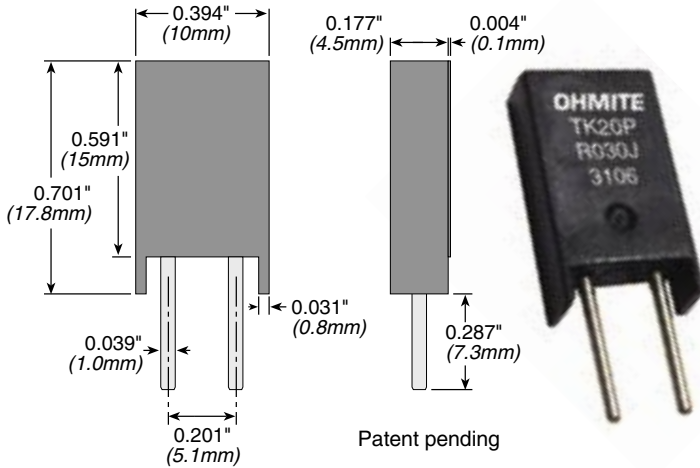


TK/TN Series

20 and 15 Watt TO-220 Package Thick and Thin Film



Patent pending

Ohmite is proud to introduce the newest addition to our family of Heat Sinkable Power Resistors. The TK/TN Series offers 3 major advances over existing TO-220 products:

- Low Resistance Values down to 0.03 ohms for current sense applications
- Low Cost
- Thin Film Construction is the first Thin Film power resistor in heatsinkable packaging on the market.

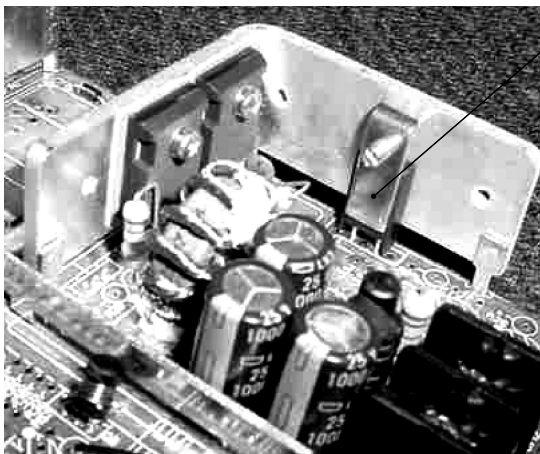
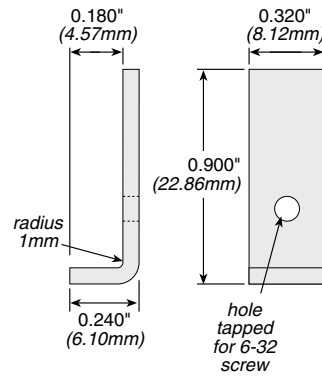
WHY THIN FILM?

Thin film technology offers the following performance advantages:

- Extremely stable (low TCR)
- Low Noise (parasitic capacitance and resistance)
- Excellent High Frequency Performance
- High Accuracy (tight tolerances)

BRACKET

6200E: recommended mounting bracket kit (optional)



TK/TN mounted vertically

SPECIFICATIONS

Material

Resistive element: Thick or thin film chip resistor

Terminals: Tin plated copper (100Sn)

Case: Ryton

Heatsink plate: Black anodized aluminum

Electrical	Thick film TK20	Thin film TN15
Power rating:	20W	15W
(Heat-sink dependent; must be attached to a proper heat sink for full power rating. Max. case temp. cannot exceed 150°C.)		
Derating:	Linear, 100% at 25°C to 0% at 150°C	
Resistance Range:	10mΩ-10KΩ	4Ω-10KΩ
Tolerance:	5%	1%, 2%
Max. working voltage:	0.01Ω-1KΩ: $\sqrt{20^*R}$ 3KΩ-10KΩ: 150V	$\sqrt{15^*R}$ 200V
Max. working current:	0.01Ω-0.1Ω: 10A 0.3Ω-10KΩ: $\sqrt{20/R}$ 4Ω-10KΩ:	$\sqrt{15/R}$
TCR:	0.01Ω-0.1Ω: ±300ppm 0.3Ω-10KΩ: ±200ppm 4Ω-10KΩ:	±50ppm (lower available)
Thermal resistance. R_{th}:	<6.25°C/W	<8.33°C/W

ORDERING INFORMATION

TK20P1R00JE

Series	TCR	Resistance	Tolerance	RoHS
TK20 = 20W thick film TN15 = 15W thin film	(TN15 only) P = ±50ppm L = ±25ppm V = ±10ppm X = ±5ppm	Example: R075 = 75mΩ 7R50 = 7.5Ω 75R0 = 75Ω 7K50 = 7500Ω	F = 1% G = 2% J = 5%	Compliant

STANDARD PART NUMBERS

Ohms	TK20 thick film 20 watt		TN15 thin film 15 watt	
	5% tol.	1% tol.	1% tol.	2% tol.
0.03	TK20PR030JE			
0.04	TK20PR040JE			
0.05	TK20PR050JE			
0.075	TK20PR075JE			
0.1	TK20PR100JE			
0.3	TK20PR300JE			
0.4	TK20PR400JE			
0.5	TK20PR500JE			
0.75	TK20PR750JE			
1	TK20P1R00JE		TN15P4R00FE	
3	TK20P3R00JE		TN15P5R00FE	
4	TK20P4R00JE		TN15P7R50FE	
5	TK20P5R00JE			
7.5	TK20P7R50JE			
10	TK20P10R0JE			TN15P10R0GE
30	TK20P30R0JE		TN15P30R0FE	
40	TK20P40R0JE		TN15P40R0FE	
50	TK20P50R0JE		TN15P50R0FE	
75	TK20P75R0JE		TN15P75R0FE	
100	TK20P100RJE			TN15P100RGE
300	TK20P300RJE		TN15P300RFE	
400	TK20P400RJE		TN15P400RFE	
500	TK20P500RJE		TN15P500RFE	
750	TK20P750RJE		TN15P750RFE	
1000	TK20P1K00JE			TN15P1K00GE
3000	TK20P3K00JE		TN15P3K00FE	
4000	TK20P4K00JE		TN15P4K00FE	
5000	TK20P5K00JE		TN15P5K00FE	
7500	TK20P7K50JE		TN15P7K50FE	
10,000	TK20P10K0JE			TN15P10K0GE

Check product availability at www.ohmite.com