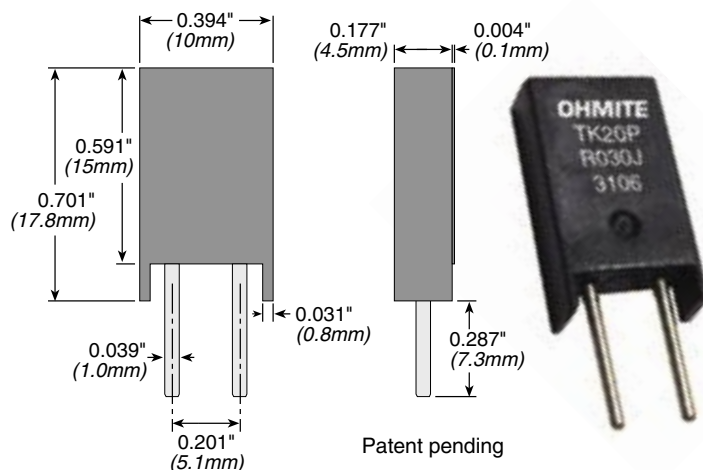


TK/TN Series

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.

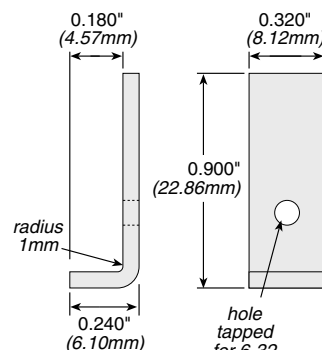
WHY THIN FILM?

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

Leads: 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:	$\sqrt{20 \cdot R}$
	3KΩ-10KΩ:	150V
	4Ω-10KΩ:	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 only)	Example:	F = 1%	Compliant
TN15 = 15W thin film	P = ±50ppm	R075 = 75mΩ	G = 2%	
	L = ±25ppm	7R50 = 7.5Ω	J = 5%	
	V = ±10ppm	75R0 = 75Ω		
	X = ±5ppm	7K50 = 7500Ω		

STANDARD PART NUMBERS

Ohms	TK20 thick film 20 watt	TN15 thin film 15 watt	
	5% 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		
3	TK20P3R00JE		
4	TK20P4R00JE	TN15P4R00FE	
5	TK20P5R00JE	TN15P5R00FE	
7.5	TK20P7R50JE	TN15P7R50FE	
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