

TNP10 Series

Thin Film TO-126 Resistor



Ohmite offers a high power heatsinkable TO-126 packaged resistor. They can achieve 1W in free air and 10W when attached to a proper heatsink. The non-inductive design is ideal for high speed circuits. These models exhibit low noise, high frequency operation and high density installation. Applications include: Constant current sources, electronic load circuits, LSI tests, measurement, audio PA systems and motor control.

SPECIFICATIONS

Series	Wattage*	Resistance Range (Ω)	Tolerance	TCR (ppm/°C)	Heat Resistance**
TNP10S	10W	0.09-0.1	5% (J)	±250	5.9°C/W
		0.1-9.1	±1% (F), 5% (J)	±100	
		10-51K	±1% (F)	±50	

* Flange temp. -55° - 25°C; 1W at free air **From hot spot to flange

CHARACTERISTICS

Resistance Range	Values listed below; others on request
Temp. Range	-55°C to +155°C
Rated Temperature	+25°C
Rated Power	10W (-55 to 25°C flange temperature), 1W free air

Item	Performance	Condition
Dielectric Withstanding Voltage	2000VAC	60 sec., between terminals and flange
Insulation Resistance	Over 1000MΩ	Between terminals and flange
Moisture Resistance	±(1.0%+0.05Ω)	60°C, 90 to 95%RH, DC 0.1W, 1000 hrs.
Load Life	±(1.0%+0.05Ω)	25°C, 90min. ON, 30min. OFF, 1000hrs
Soldering Heat	±(1.0%+0.05Ω)	350 ±5°C, 3 sec.
Solderability	Over 95% of surface	230 ±5°C, 3 sec.
Vibration	±0.25%	IEC 60068-2-6

Derating



*with 2.8K/W heatsink

Temperature Rise



Construction



THIS PRODUCT IS DESIGNED FOR USE WITH PROPER HEATSINKING.

Maximum base plate temperature of the resistor must be monitored and kept within specified limits to establish the power rating. Best technique is to attach a thermocouple to the side of the base plate of the resistor. Temperature of plastic housing or heat sink cannot be used to establish rating of the resistor.

(continued)

