

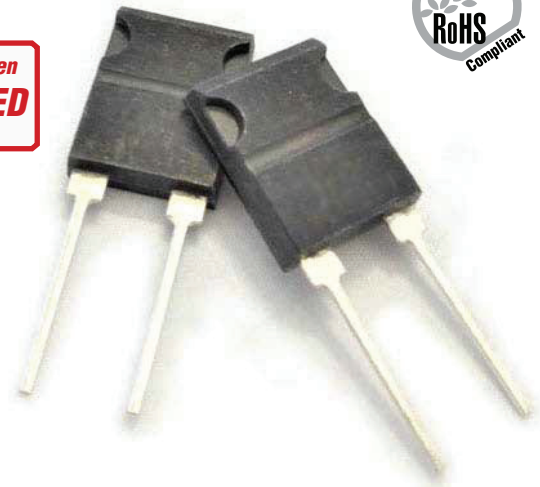
TEH140P Series

140 Watt TO-247 Power Resistors for High Frequency and Pulse Loading Applications

This product has been
DISCONTINUED
since September 2022



The TEH140P offers completely encapsulated and insulated TO-247 package. The TEH140P is ideal for high-frequency and pulse-loading applications. The non inductive design of the TEH140P series is rated at 140W mounted to a heat sink.



FEATURES

- 140 Watt operating power
- TO-247 package configuration
- Clip (included) mounting simplifies attachment to heat sink
- Non-Inductive design

APPLICATIONS

- UPS
- Motor control
- Snubber circuits
- Gate control
- Bleeder resistor
- In-rush current protection

SPECIFICATIONS

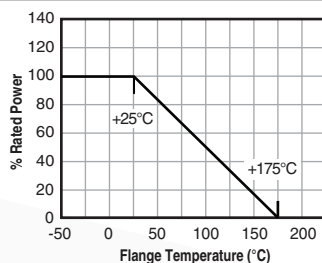
Resistance range	TCR	Std. tolerance
0.2Ω-10Ω	consult Ohmite	±1%
>10Ω-1MΩ	50ppm/°C	±1%

CHARACTERISTICS

Resistance value	0.2Ω ≤ 1MΩ
Resistance tolerance	±1% to ±10%; ±0.5% on special request for limited ohmic values
Derating	1.00 W/K (1.0 K/W). Without a heat sink, when in open air at 45°C, the TEH140P is rated for 4.5 W.
Temperature coefficient	>10R: ±50 ppm/°C referenced to 25°C, ΔR taken at +105°C (other TCR on special request for limited ohmic values)
Power rating	140W at 25°C bottom case temperature
Maximum operating voltage	700 VDC
Dielectric strength	1800 VAC
Insulation resistance	min. 10GΩ
Working temperature	-55°C to +175°C
Lead material	tinned copper
Weight	~4.2 g

Momentary overload	2 times rated power, but no more than 1.5 time max. continuous operating voltage, last 5s	ΔR ≤ ±(0.3%R + 0.001Ω)
Load life	2,000 hours at rated power, MIL-R-39009D	ΔR ≤ ±(1.0%R + 0.001Ω)
Moisture resistance	MIL-Std.-202, method 106	ΔR ≤ ±(0.5%R + 0.001Ω)
Thermal shock	MIL-Std.-202, method 107, Cond. F	ΔR ≤ ±(0.3%R + 0.001Ω)
Terminal strength	MIL-Std.-202, method 211, Cond. A (pull test) 2.4 N	ΔR ≤ ±(0.2%R + 0.001Ω)
Vibration, high frequency	MIL-Std.-202, method 204, Cond. D	ΔR ≤ ±(0.2%R + 0.001Ω)

Derating



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.

PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE TO IMPROVE RELIABILITY, FUNCTION, DESIGN OR OTHERWISE WITHOUT WARNING

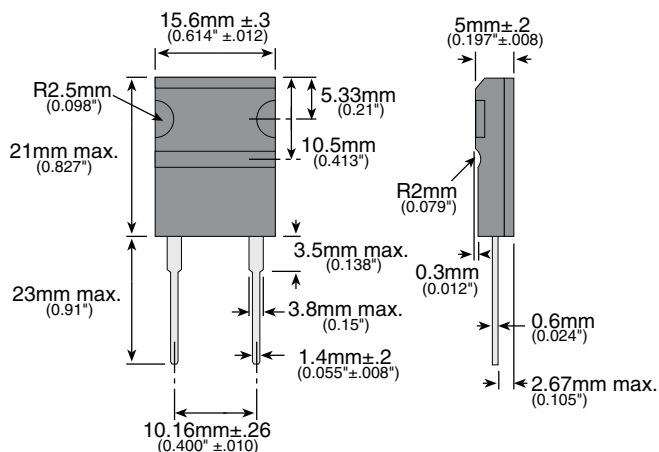
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TEH140P Series

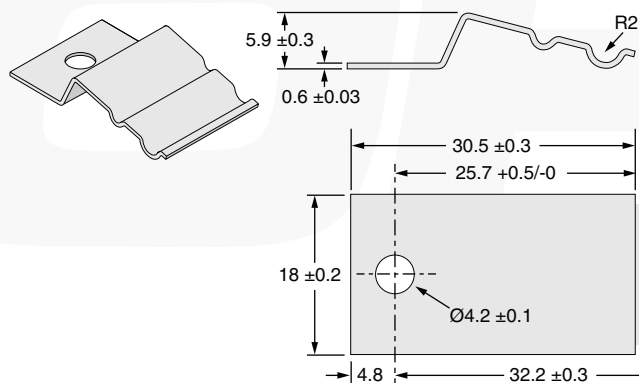
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DIMENSIONS

mm/(in)



CLIP



Resistor and clip are sold together
Material: 65Mn, thickness 0.60mm
Hardened: HCR45-48
Zinc-plated: 8-10pm

ORDERING INFORMATION

TEH140P10R0FE			
Series	Modifier	Ohms	Tolerance
		R = Decimal	F = 1%
		Example:	J = 5%
		2R50 = 2.50Ω	
		25R0 = 25Ω	
		100R = 100Ω	
		1K00 = 1000Ω	

RoHS Compliant