# **TP Series**



# High Energy Thick Film on Alumina Substrate

TP Series high energy resistors offer the user the benefits of non-inductive performance and high power density. As an added feature, they provide the impulse energy capability normally associated with wirewound or composition resistors. Double-sided screen printing of pulse-tolerant thick film ink, coupled with a sophisticated scan-cut laser trimming process, maximize the energy withstanding capabilities of the TP Series.

## FEATURES

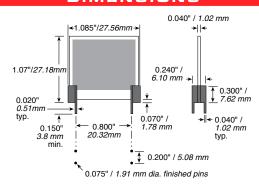
- High-Temp Terminal Construction
- Wide Resistance Range
- Low Inductance (50nH-100nH)
- High Power Density
- Easy to install.
   PC-mountable



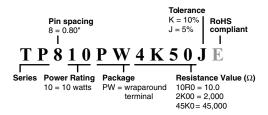
CHARACTERISTICS		
Substrate	Alumina	Dulas
Resistor	Thick Film	Pulse
Coating	Glass	$\bigvee_{V} = \frac{1}{2}CV^2$
Terminals	Solder Plated Phosphor Bronze	
Thermal Conductivity	20 Watts/Meter/°C	<b>→</b>  t  <del>&lt;</del>
Temperature Coefficient	1 to $100\Omega$ : $100 \text{ ppm/°C}$ $101\Omega$ and up: $50 \text{ ppm/°C}$	E = Energy (joules) t = Time (seconds) V = Voltage (volts)
Tolerance	±1%, ±5% and ±10%	R = Resistance (ohms)
Power Rating	Based on 25°C free air	C = Capacitance (farads)
Resistance Range	10 ohms to 1M ohm. Consult factory for other values	
Maximum Operating Voltage	350 VAC, 500 VDC through glass	
Energy Rating	100J: 100ms pulse with 100uF capacitor, not to exceed 1500 volts	
Derating	100% @ 25°C to 0% @ 180°C ambient.	

### DIMENSIONS

 $(\pm .020 in. / \pm .508 mm)$ 



#### **ORDERING INFORMATION**



#### Standard part numbers for TP series

TP810PW10R0JE
TP810PW20R0JE
TP810PW50R0JE
TP810PW100RJE
TP810PW470RJE
TP810PW1K00JE
TP810PW4K70JE
TP810PW4K70JE
TP810PW10K0JE