

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
Resistor	Thick Film
Coating	Glass
Terminals	Solder Plated Phosphor Bronze
Thermal Conductivity	20 Watts/Meter/°C
Temperature Coefficient	1 to 100Ω: 100 ppm/°C 101Ω and up: 50 ppm/°C
Tolerance	±1%, ±5% and ±10%
Power Rating	Based on 25°C free air
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.

Pulse

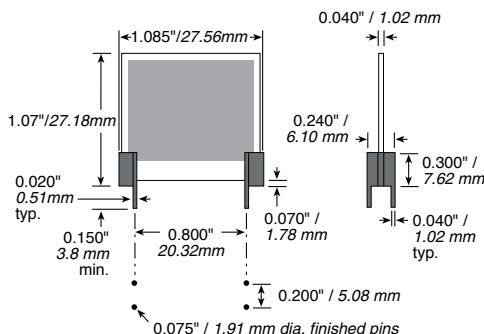
$$E = \frac{1}{2} CV^2$$

$$t = RC$$

E = Energy (joules)
t = Time (seconds)
V = Voltage (volts)
R = Resistance (ohms)
C = Capacitance (farads)

DIMENSIONS

(±.020 in. / ±.508mm)



ORDERING INFORMATION

Pin spacing 8 = 0.80"		Tolerance K = 10% J = 5%		RoHS compliant
TP	810PW4K50JE			
Series	Power Rating 10 = 10 watts	Package PW = wraparound terminal	Resistance Value (Ω) 10R0 = 10.0 2K00 = 2,000 45K0 = 45,000	

Standard part numbers for TP series

TP810PW10R0JE
TP810PW20R0JE
TP810PW50R0JE
TP810PW100RJE
TP810PW470RJE
TP810PW1K00JE
TP810PW4K70JE
TP810PW10K0JE