

TP Series



High Energy Thick Film on Alumina Substrate

HIGH
ENERGY/
SURGE

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

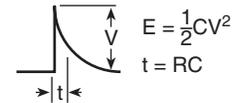
- High-Temp Terminal Construction
- Wide Resistance Range
- Low Inductance (50nH-100nH)
- High Power Density
- Easy to install. PC-mountable



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, 1000 VAC, 1500 VDC through substrate
Energy Rating	100J: 100ms pulse with 100uF capacitor, not to exceed 1500 volts
Derating	100% @ 25°C to 0% @ 180°C ambient.

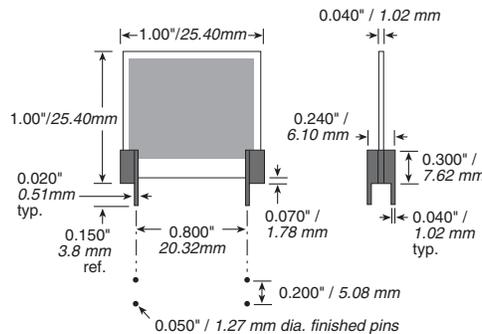
Pulse



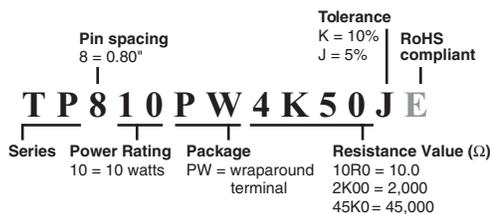
E = Energy (joules)
t = Time (seconds)
V = Voltage (volts)
R = Resistance (ohms)
C = Capacitance (farads)

DIMENSIONS

(±.020 in. / ±.508mm)



ORDERING INFORMATION



Standard part numbers for TP series

- TP810PW10R0JE
- TP810PW20R0JE
- TP810PW50R0JE
- TP810PW100RJE
- TP810PW470RJE
- TP810PW1K00JE
- TP810PW4K70JE
- TP810PW10K0JE