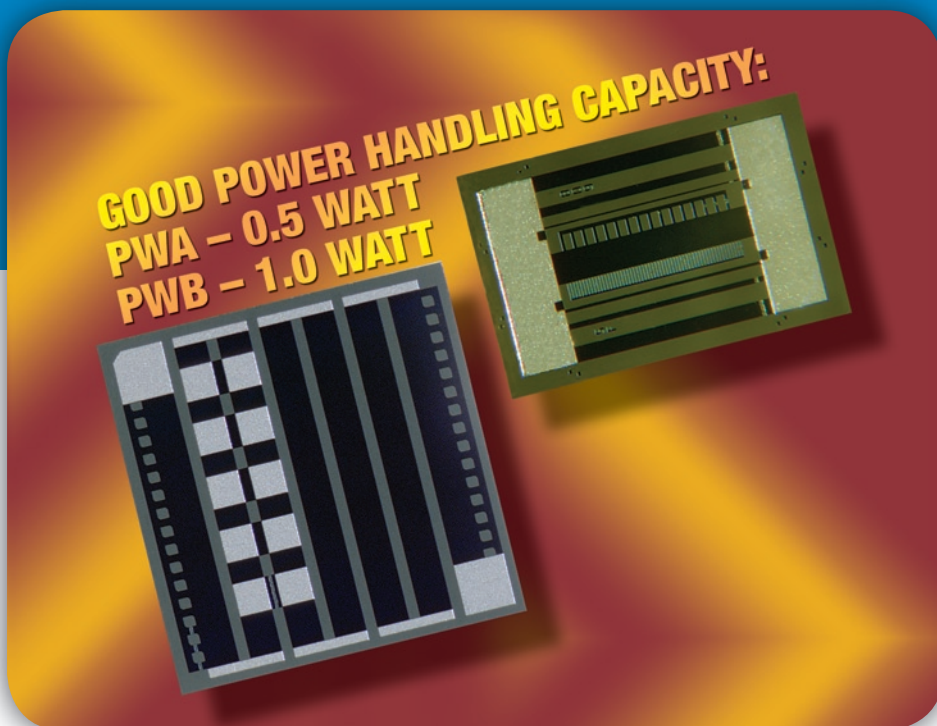




# RESISTIVE PRODUCTS –

## Model PWA and PWB



### Thin Film Wire-Bondable Power Resistors

#### FEATURES

- **Small Size:** 0.030 x 0.045 inches (PWA)  
0.070 x 0.070 inches (PWB)
- **Excellent Power Capability:** 0.5 watts (PWA)  
1.0 watts (PWB)
- **Good Power Handling:** 100% rated power to + 70 °C derated to 0% power at + 125 °C

#### APPLICATIONS

- High-power amplifier circuits where increased power loads require specialized resistors
- Power supplies

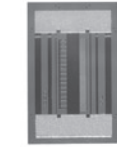


### Thin Film Power Resistors

#### FEATURES

- 500mW power
- Chip size: 0.030 x 0.045 inches
- Resistance range 0.3Ω to 1MΩ

Product may not be to scale

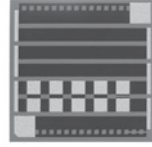
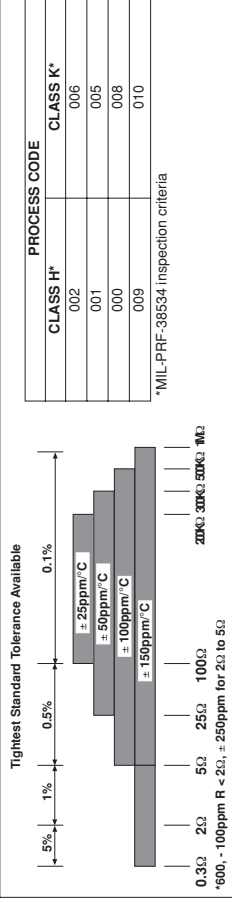


The PWA series resistor chips offer a 500mW power rating in a small size. These offer one of the best combinations of size and power available. The PWAs are manufactured using Vishay Electro-Films (EF) sophisticated thin film equipment and manufacturing technology. The PWAs are 100% electrically tested and visually inspected to MIL-STD-883.

#### APPLICATIONS

The PWA resistor chips are used mainly in higher power circuits of amplifiers where increased power loads require a more specialized resistor.

#### TEMPERATURE COEFFICIENT OF RESISTANCE, VALUES AND TOLERANCES



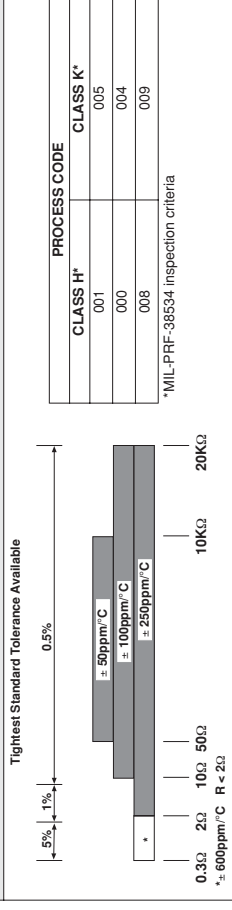
Product may not be to scale

The PWB series resistor chips offer a 1 watt power rating in a relatively small size. They offer one of the best combinations of size and power available. The PWBs are manufactured using Vishay Electro-Films (EF) sophisticated thin film equipment and manufacturing technology. The PWBs are 100% electrically tested and visually inspected to MIL-STD-883.

#### APPLICATIONS

The PWB resistor chips are used mainly in higher power circuits of amplifiers where increased power loads require a more specialized resistor.

#### TEMPERATURE COEFFICIENT OF RESISTANCE, VALUES AND TOLERANCES



#### STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	VALUES AND TOLERANCES
Noise, MIL-STD-202, Method 308 100Ω - 250kΩ < 100Ω or > 251kΩ	-35dB typical -20dB typical
Moisture resistance, MIL-STD-202 Method 106	± 0.5% maximum ΔR/R
Stability, 1000 hours, + 125°C, 250mW	± 0.5% maximum ΔR/R
Operating temperature range	-55°C to + 125°C
Thermal shock, MIL-STD-202, Method 107, Test condition F	± 0.1% maximum ΔR/R
High temperature exposure, + 150°C, 100 hours	± 0.2% maximum ΔR/R
Dielectric voltage breakdown	200V
Insulation resistance	10 <sup>12</sup> minimum
Operating voltage steady state	100V maximum 200V maximum
5 x rated power	500mW
DC power rating at + 70°C (derated to zero at + 175°C) (Conductive epoxy die attach to alumina substrate)	
5 x rated power short-time overload, + 25°C, 5 seconds	± 0.1% maximum ΔR/R

Revision 23-Feb-04

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