

Thin Film Wire Bondable Power Resistors



KEY BENEFITS

- Small size: 0.030 x 0.045 in. (PWA); 0.070 x 0.070 in. (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

RESOURCES

- Datasheet: PWA http://www.vishay.com/doc?61019
- Datasheet: PWB http://www.vishay.com/doc?61021
- For technical questions contact <u>efi@vishay.com</u>

One of the World's Largest Manufacturers of Discrete Semiconductors and Passive Components





THIN FILM RESISTORS PWA and PWB

Thin Film Wire Bondable Power Resistors

PWA



Product may not be to scale

The PWA series resistor chips offer a 500 mW 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 (EFI) sophisticated thin film equipment and manufacturing technology. The PWAs are 100 % electrically tested and visually inspected to MIL-STD-883, method 2032, class H or class K.

FEATURES

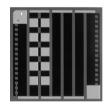
- Wire bondable
- 500 mW power
- Chip size: 0.030" x 0.045"
- Case: 0503
- Resistance range 0.3 Ω to 1 M Ω
- · Oxidized silicon substrate for good power dissipation
- · Resistor material: Tantalum nitride, self-passivating

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		
PARAMETER	VALUE	UNIT
Total Resistance Range	0.3 to 1M	Ω
Standard Tolerances	± 0.1, ± 0.5, ± 1, ± 5	%
TCR	± 25, ± 50, ± 100, ± 150	ppm/°C

PWB



Product may not be to scale

The PWB series resistor chips offer a 1 W 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 (EFI) sophisticated thin film equipment and manufacturing technology. The PWBs are 100 % electrically tested and visually inspected to MIL-STD-883, method 2032, class H or class K.

FEATURES

- Wire bondable
- Power: 1 W
- Chip size: 0.070 inches square
- Case: 0707
- Resistance range: 0.3 Ω to 20 k Ω
- Oxidized silicon substrate for good power dissipation
- Resistor material: Tantalum nitride, self-passivating

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		
Yug-	PARAMETER	VALUE	UNIT
02-7	Total Resistance Range	0.3 to 20K	Ω
sion	Standard Tolerances	± 0.5, ± 1, ± 5	%
Revi	TCR	± 50, ± 100, ± 250	ppm/°C