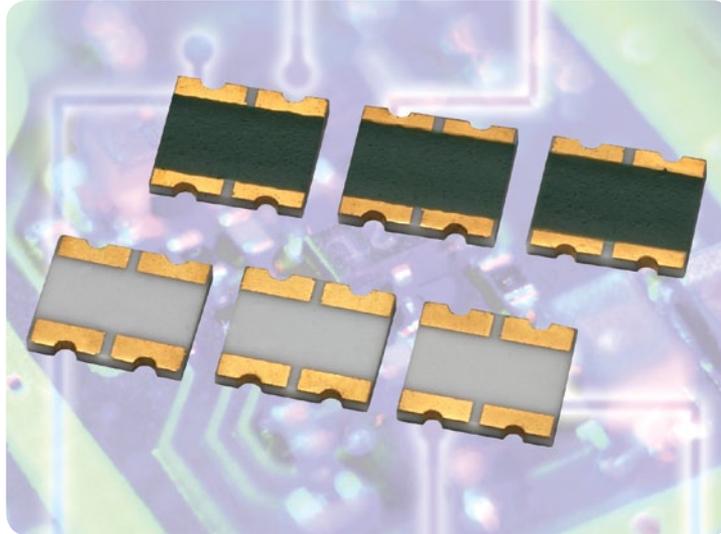


High Precision Thin Film Resistor, Surface-Mount Arrays (1206, 0805, and 0603 Case Sizes)



KEY BENEFITS

- Resistance range 100 Ω to 1 M Ω
- Low profile: 0.4 mm height
- Small overall size (1 mm, 1.35 mm, and 1.82 mm pitches)
- Ratio tolerance: ± 0.02 %

APPLICATIONS

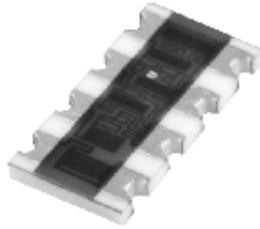
- Instrumentation amplifiers
- Precision voltage dividers
- Bridge networks circuitry

RESOURCES

- Datasheet: PR Series - <http://www.vishay.com/doc?53039>
- For technical questions contact thinfilm@vishay.com



High Precision Thin Film Resistor, Surface-Mount Arrays (1206, 0805, and 0603 Case Sizes)



Product may not be to scale

PR arrays can be used in most applications requiring a matched pair (or set) of resistor elements. The networks provide 2 ppm/°C TCR tracking, a ratio tolerance as tight as 0.02 % and outstanding stability. They are available in 1 mm, 1.35 mm and 1.82 mm pitch.

FEATURES

- Gold terminations over nickel barrier
- High stability passivated nichrome resistive layer
- Tight TCR (10 ppm/°C) and TCR tracking (to 2 ppm/°C)
- Very low noise and voltage coefficient < - 30 dB, 0.1 ppm/V typical
- Ratio tolerance to 0.02 %
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition

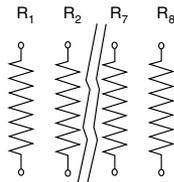


RoHS COMPLIANT
HALOGEN FREE

SCHEMATIC

Schematic A: Independent Resistors

Electrical Diagram



Number of Resistors: 2 to 8

$R_1 = R_2 = \dots R_8$

DIMENSIONS in mils

DIMENSION	PR100	PR135	PR182
A	64 ± 6	72 ± 6	118 ± 6
B	17	20.3	23.6
C	30	43.3	61.8
D	10	10	10
E (1)	$E = (N \times F) \pm 8$	$E = (N \times F) \pm 8$	$E = (N \times F) \pm 8$
F	40	53.3	71.8
G	15	15	15

Notes (1) Where "N" = Number of resistors
• ± 2 mils unless specified

STANDARD ELECTRICAL SPECIFICATIONS

TEST	SPECIFICATIONS	CONDITIONS
Material	Passivated nichrome	-
Pin/Lead Number	-	-
Resistance Range	100 Ω to 200 kΩ (PR100) 100 Ω to 300 kΩ (PR135) 100 Ω to 1 MΩ (PR182)	-
TCR: Absolute	± 10 ppm/°C	- 55 °C to + 125 °C
TCR: Tracking	± 2 ppm/°C	- 55 °C to + 125 °C
Tolerance: Absolute	± 0.1 % to ± 10 %	-
Tolerance: Ratio	± 0.02 % to ± 0.1 %	-
Power Rating: Resistor	100 mW (PR100) 125 mW (PR135) 200 mW (PR182)	At + 70 °C
Power Rating: Package	-	-
Stability: Absolute	-	-
Stability: Ratio	-	-
Voltage Coefficient	≤ 0.1 ppm/V	-
Working Voltage	35 V (PR100) 75 V (PR135) 100 V (PR182)	-
Operating Temperature Range	- 55 °C to + 125 °C	-
Storage Temperature Range	- 55 °C to + 150 °C	-
Noise	≤ - 30 dB	-
Thermal EMF	-	-
Shelf Life Stability: Absolute	-	-
Shelf Life Stability: Ratio	-	-

Revision 20-Oct-11