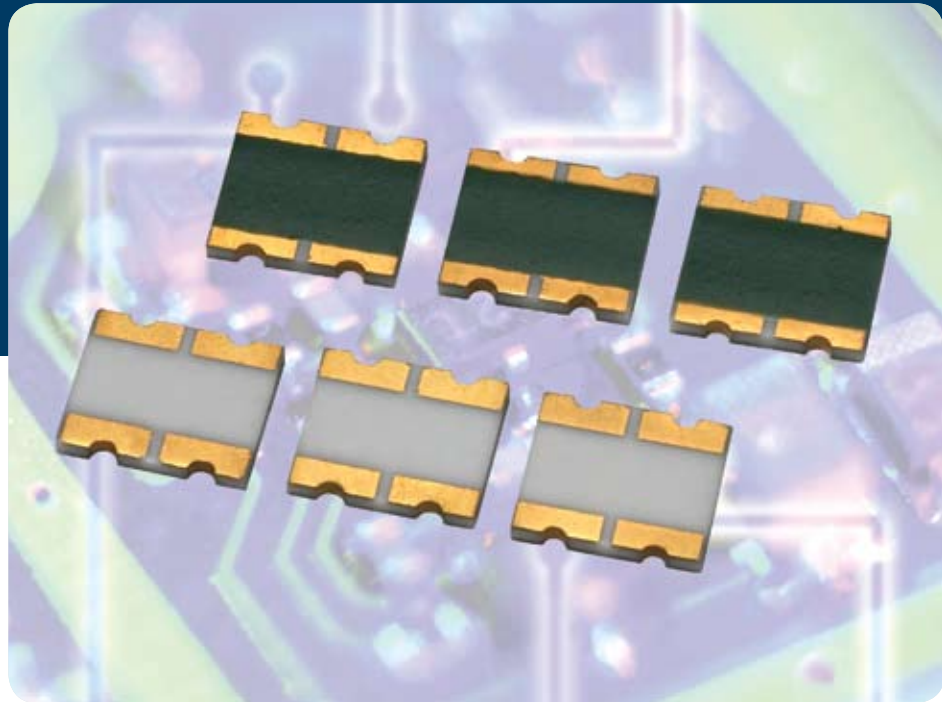




RESISTIVE PRODUCTS

PR Series



Precision Thin Film Resistor Array PR Series

PR Series (Chip Array 1206, 0805, and 0603 case sizes)

FEATURES

- 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

High Precision Resistor Arrays

FEATURES

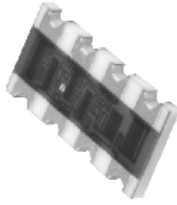
- Gold terminations over nickel barrier
- High stability passivated nichrome resistive layer
- Tight TCR (10 ppm/°C) and TCR tracking (to 2 ppm/°C)
- Very low noise and voltage coefficient < -30 dB, 0.1 ppm/V typical
- Ratio tolerance to 0.02 %



Available



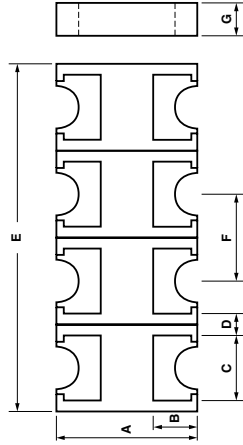
RoHS* COMPLIANT



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.

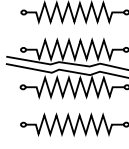
DIMENSIONS



Schematic A: Independent resistors

Electrical Diagram

R1 R2 R7 R8



Number of resistors: 2 to 8
R1 = R2 = ... R8

CHIP DIMENSIONS		PR100	PR135	PR182
DIMENSIONS		Mils	Mils	Mils
A	64 ± 6	72 ± 6	118 ± 6	
B	17	20.3	23.6	
C	30	43.3	61.8	
D	20	20	20	
E ¹⁾	E = (N x F) ± 8	E = (N x F) ± 8	E = (N x F) ± 8	
F	40	53.3	71.8	
G	15	15	15	

Notes

1. Where "N" = number of resistors
2. ± 2 mils unless specified

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STANDARD ELECTRICAL SPECIFICATIONS		
TEST	SPECIFICATIONS	CONDITIONS
Material	Passivated Nichrome	
Resistance Range:	PR 100 100 Ω to 200 kΩ PR 135 100 Ω to 300 kΩ PR 182 100 Ω to 1 MΩ	
Tolerance:	Absolute ± 10 %, to ± 0.1 % Ratio 0.1 %, 0.05 %, 0.02 %	
TCR:	Absolute ± 10 ppm/°C Ratio 2 ppm/°C	-55 °C to +125 °C -55 °C to +125 °C
Power Rating:	PR 100 100 mW per resistor PR 135 125 mW per resistor PR 182 200 mW per resistor	at +70 °C at +70 °C at +70 °C
Operating Temperature Range	-55 °C to +125 °C	
Noise	-30 dB	
Voltage Coefficient	≤ 0.1 ppm/V	
Working Voltage:	PR 100 35 V PR 135 75 V PR 182 100 V	

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: PR100A41002BBGTS

P	R	1	0	0	A	4	1	0	0	2	B	B	G	T	S
GLOBAL MODEL	SCHEMATICS	NUMBER OF RESISTORS	RESISTANCE	ABSOLUTE TOLERANCE	RATIO TOLERANCE	TERMINATION	PACKAGING								
PR100 PR135 PR182	A = Isolated resistors	2 3 4 5 6 7 8	First 3 digits are significant figures and the last digit specifies the number of zeroes to follow. Example: 1000 = 1000 Ω 1001 = 1000 Ω	B = 0.1 % C = 0.25 % D = 0.5 % F = 1 % G = 2 % J = 5 % K = 10 %	P = 0.02 %** W = 0.05 %** B = 0.1 % C = 0.25 % D = 0.5 % F = 1 %	G = Whipsand Au over Ni termination e4 Epoxy Solvable WS = Wafer 100 Min 1 Mult TS = Tape and Reel 100 Min 1 Mult	WS = Wafer 100 Min 1 Mult TS = Tape and Reel 100 Min 1 Mult								
PR100	A	4	1002	B	B	S	T								
SERIES	SCHEMATIC	NUMBER	RESISTANCE	ABSOLUTE TOLERANCE	RATIO TOLERANCE	TERMINATION	PACKAGING								

Historical Part Number example: PR100A41002BBST (will continue to be accepted)