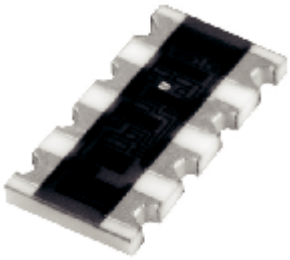
High Precision Thin Film Network, Surface Mount Leadless Resistor Arrays



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 %
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

Pb-free

e4

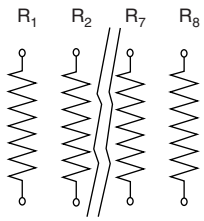
RoHS COMPLIANT

HALOGEN FREE

SCHEMATIC

Schematic A: Independent Resistors

Electrical Diagram

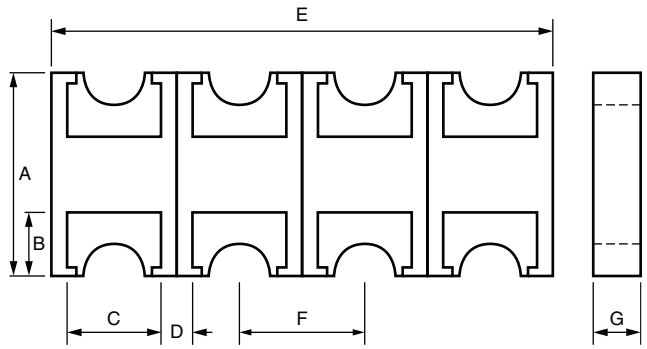


Number of Resistors: 2 to 8

$R_1 = R_2 = ... R_8$

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	-	-

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 x F) ± 8	E = (N x F) ± 8	E = (N x F) ± 8
F	40	53.3	71.8
G	15	15	15

Notes

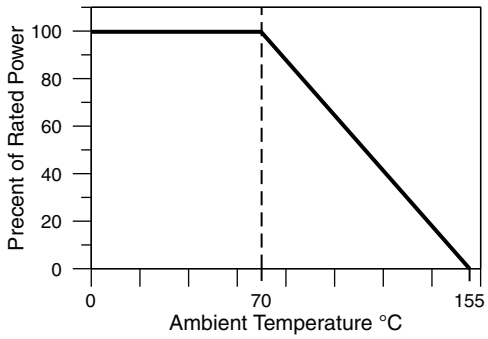
- ± 2 mils unless specified

(1) Where “N” = Number of resistors

MECHANICAL SPECIFICATIONS

Substrate	Alumina 99.6 %
Technology	Thin Film
Film	Passivated nichrome
Terminations	Solderable gold (Au) over nickel

DERATING CURVE



PACKAGING

Waffle-pack or tape and reel

MARKING

On the primary package, printed information includes Vishay trademark series and model, schematic number of resistors, ohmic value, absolute tolerance, ratio tolerance, type of termination

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 zeros to follow. Example: **10R0** = 10 Ω **12R5** = 12.5 Ω **1000** = 100 Ω **1001** = 1000 Ω	**B** = 0.1 % **C** = 0.25 % **D** = 0.5 % **F** = 1 % **G** = 2 % **J** = 5 % **K** = 10 %	**Q** = 0.01 % (1) **P** = 0.02 % (2) **W** = 0.05 % (3) **B** = 0.1 % **C** = 0.25 % **D** = 0.5 % **F** = 1 %	**G** = Wraparound Au over Ni termination e4 lead (Pb)-free RoHS compliant	TAPE AND REEL (4) **T0** = 100 min., 100 mult **T1** = 1000 min., 1000 mult **T3** = 300 min., 300 mult **T5** = 500 min., 500 mult **TF** = Full reel **TS** = 100 min., 1 mult **TI** = 100 min., 1 mult (5) **TP** = 100 min., 1 mult (6) WAFFLE **WS** = 100 min., 1 mult **WS** = 100 min., 1 mult (5) **WS** = 100 min., 1 mult (6)

Historical Part Number example: PR100A41002BBGT (for reference purposes only)

PR100	A	4	1002	B	B	G	T
SERIES	SCHEMATIC	NUMBER	RESISTANCE	ABSOLUTE TOLERANCE	RATIO TOLERANCE	TERMINATION	PACKAGING

Notes

(1) 10 kΩ, up to 4 resistors
(2) > 1 kΩ, max. 4 resistors
(3) > 100 Ω, up to 8 resistors
(4) Please refer to below table for tape and reel availability
(5) Item single lot date code
(6) Package unit single lot date code

TAPE AND REEL AVAILABILITY

NUMBER OF RESISTORS	PR100	PR135	PR182
2	Available	Available	Available
3	••	Available	••
4	Available	Available	Available
5	••	Available	Available
6	Available	Available	••
7	••	Available	••
8	Available	••	••

Note

•• Not available, consult factory

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Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

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- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

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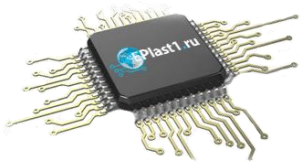
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.