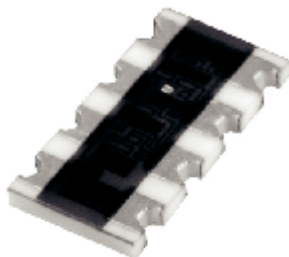


High Precision Thin Film Network, Surface Mount Leadless Resistor Arrays



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

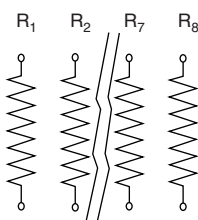


RoHS
COMPLIANT
HALOGEN
FREE

SCHEMATIC

Schematic A: Independent Resistors

Electrical Diagram



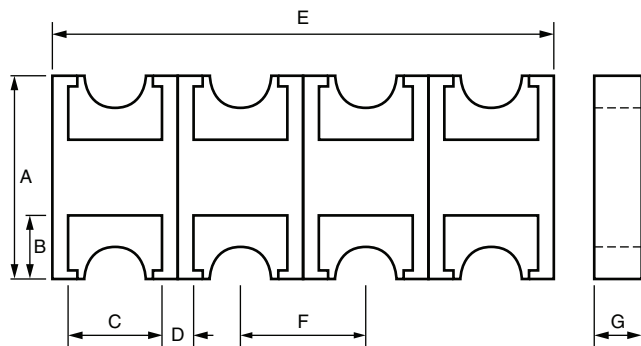
Number of Resistors: 2 to 8

$$R_1 = R_2 = \dots R_8$$

STANDARD ELECTRICAL SPECIFICATIONS		
TEST	SPECIFICATIONS	CONDITIONS
Material	Passivated nichrome	-
Pin/Lead Number	-	-
Resistance Range	100 Ω to 200 k Ω (PR100) 100 Ω to 300 k Ω (PR135) 100 Ω to 1 M Ω (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	$\leq - 30$ 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⁾	$E = (N \times F) \pm 8$	$E = (N \times F) \pm 8$	$E = (N \times F) \pm 8$
F	40	53.3	71.8
G	15	15	15

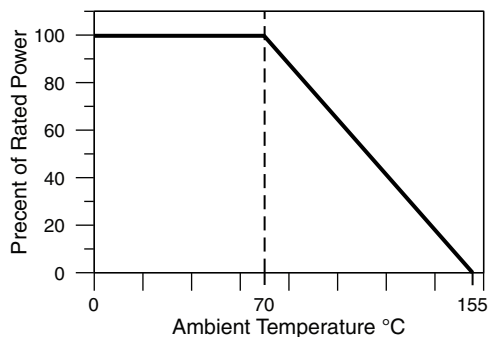
Notes

- ± 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 k Ω , up to 4 resistors
 (2) > 1 k Ω , 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



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

Material Category Policy

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.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9