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DEMINT

Electronics Co., Ltd.

(UPRNS) High Precision Network Voltage Divider

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Product Introduction

DeMint's (UPRNS) high precision network voltage divider saves on resistors.

Features :

- UPRNS: Serial dip type; UPRND: Parallel dip type.
- Any value available within resistance range.
- Lead (Pb)-free and RoHS compliant.
- Precision tolerance tight to A2(±0.02%).
- Metal film precision networks, excellent stability and reliability.
- Superior TCR narrowed to Absolute C7(±5 ppm/℃), Relative C10(±2 ppm/℃).

Applications :

- Industrial, Military, Airborne.
- Electron Beam Applications (EB) Scanning,
- Recording Equipment, Electron Microscopes.
- Medical , Test And Measurement Equipment,
- Precision Divider, Bypass, High Precision Instrumentation,
- Audio (High End Stereo Equipment), Precision Amplifiers.

Precision thin film network technology outperforms all other resistor technologies available today for applications that require high precision and high stability. This technology has been pioneered and developed by DeMint, and products based on this technology are the most suitable for a wide range of applications.

This technology with any value available within resistance range allows customer orientated products, designed to satisfy challenging and specific technical requirements.

Precision Network Resistors UPRNS Series meets Lead (Pb)-free and RoHS compliant.

Providing design engineers with an economical power resistor with high quality performance, DeMint Electronics offers low cost industrial grade Serial UPRNS and Parallel UPRND networks.

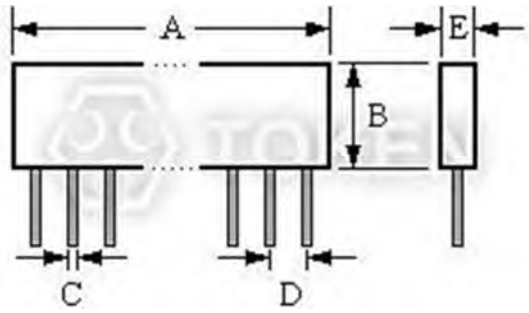
DeMint's UPRNS/UPRND Series are assembled by EE/RE 1/10 series to form a stable, high precision divider networks. Characteristic of UPRNS Series meet extreme low temperature coefficient.

Serial UPRNS equate to IRC, EBG Precision Devices with fast delivery and more competitive price. For non-standard technical requirements and special applications, please contact us. Besides, you can link to DeMint official website "Precision Resistors" to get more information.

Dimensions & Technical Characteristics

Dimensions & Technical Characteristics (UPRNS)

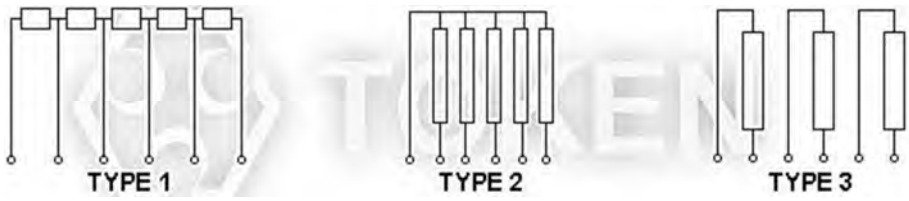
UPRNS A(mm)±0.5		14.20	16.90	21.90	24.10	35.00	42.30	50.80
Number of Pins		5	6	8	9	13	16	19
Dimensions (Unit: mm)	A	14.20±0.5 ~ 50.80±0.5						
	B	12.0±0.5						
	C	0.6±0.05						
	D	2.54±0.05						
	E	4.0±0.5						
Rated Wattage of one element unit at 70℃ (W)		0.1						
Maximum Working Voltage (V)		200						
Nominal Resistance Range of component element unit (Ω)		10 ~ 1M						
Absolute Tolerance (%)		A2(±0.02), A5(±0.05), B(±0.1), C(±0.25), D(±0.5), F(±1.0)						
Relative Tolerance (%)		T(±0.01), A2(±0.02), A5(±0.05), B(±0.1)						
Absolute Temperature Coefficient (ppm/℃)		C7(±5), C6(±10), C5(±15), C3(±25), C2(±50)						
Relative Temperature Coefficient (ppm/℃)		C10(±2), C9(±3), C7(±5), C6(±10), C5(±15)						
Working Temperature (℃)		-10 ~ +70						



Serial Network (UPRNS) Dimensions

Examples for Construction

Construction Examples (UPRNS)

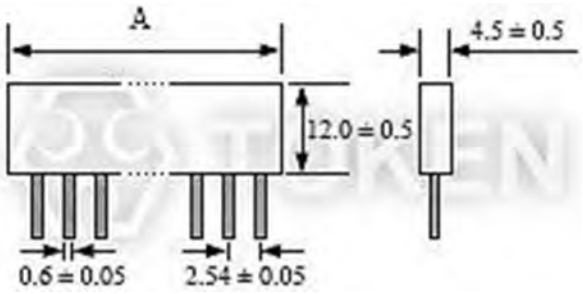


Serial Precision Voltage Divider (UPRNS) Construction Examples

- 1. There are no standard nominal resistances for UPRNS/UPRND Series.
- 2. It can be required to DeMint's representatives if requirement beyond above specifications.
- 3. Customer can designate or specify the number of component elements of Network Resistor according with this specification of UPRNS/UPRND Series to meet your own needs.

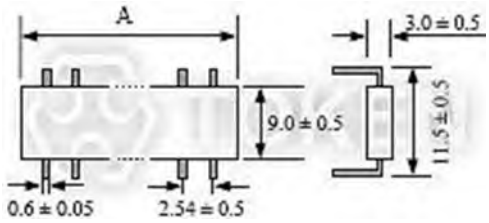
UPRNS Versus UPRND Series

Precision Resistors Network Dimensions UPRNS Versus UPRND



Serial Precision Resistor Networks (UPRNS) Dimensions

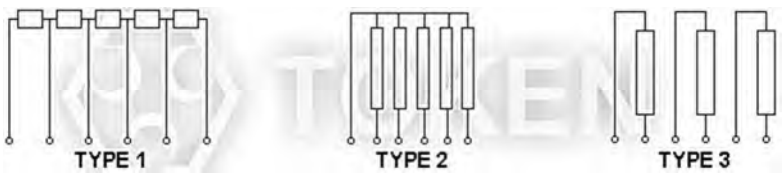
(UPRNS) Dimensions Unit: mm A ± 0.5	Pins
14.20	5
16.9	6
21.9	8
24.1	9
35	13
42.3	16
50.8	19



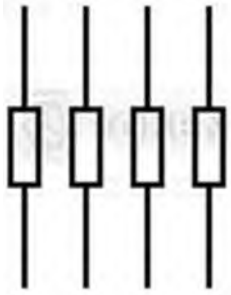
Parallel Precision Resistor Networks (UPRND) Dimensions

(UPRND) Voltage Divider Resistor Networks Dimensions Unit: mm A ± 0.5	Number of Resistors
5.08	2
11.8	4

Internal Connection UPRNS Versus UPRND



Serial Precision Resistor Network (UPRNS) Construction Examples



Parallel Precision Resistor Network (UPRND) Construction Examples

Order Codes

Order Codes (UPRNS)

UPRNS	8	Type1	10R		B			C5		
Part Number	Number of Pins	Construction	Resistance Value (Ω)		Resistance Tolerance (%)			Temperature coefficient (PPM/℃)		
UPRNS	5	Type1	10R	10	Absolute	A2	±0.02	Absolute	C7	±5
	6	Type2	100R	100		A5	±0.05		C6	±10
	8	Type3	1K1	1.1K		B	±0.10		C5	±15
	9		110K	110K		C	±0.25		C3	±25
	13		1M	1M		D	±0.50		C2	±50
	16					F	±1.00	Relative	C10	±2
	19				Relative	T	±0.01		C9	±3
						A2	±0.02		C7	±5
						A5	±0.05		C6	±10
						B	±0.10		C5	±15

General Information

High Precision Devices Made in DeMint

DeMint is equipped to design and produce custom components to meet many design and reliability demands.

DeMint's line of high-reliability and precision products reflects a long-term commitment to our industrial and military customers. In addition to standard industry-grade resistor products, we also have many resistive products designed to meet various military source-controlled drawings.

We continually strive to meet the changing application requirements of the markets by developing new products and manufacturing technologies on an on-going basis.

Enhanced Precision and Stability for Low-Cost Uses

Every component DeMint provides to the commercial, industrial, and military markets for cost-efficiency uses is backed by the comprehensive testing and failure analysis capabilities of our own technical staff, whom are industrial experts in understanding and meeting the requirements of the environment.

Low TCR - Fast Approach to a Steady State

DeMint Electronics provides a precision Temperature Coefficient of Resistance TCR as low as 2 ppm/℃, If you must guarantee a smaller resistance change in your application. TCR is the best known parameter used to specify a resistor’s stability, and is used to depict the resistive element’s sensitivity to temperature change due to ambient temperature variations.

A resistor's TCR tells how much its value changes as its temperature changes. It is usually expressed in ppm/℃ (parts per million per degree Centigrade) units.

Long-Term Proven Service

Our technical expertise, our knowledge of the industry, our broad product offering, and our ability to work long-term are all part of DeMint’s ongoing commitment to meeting the changing requirements of our most reliability-conscious customer, today and in the future.