

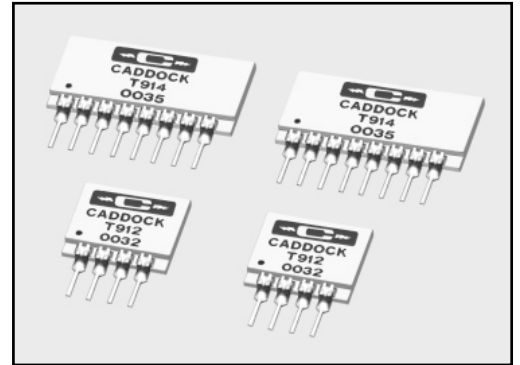
# Type T912 and T914 Precision Resistor Networks

## Resistor Pairs and Quads with Ratio Characteristics for Precision Analog Circuits

Type T912 and T914 Precision Resistor Networks are constructed with Caddock Tetrinox® resistance films to achieve the precise ratio performance and stability required by highly accurate amplifier circuits, voltage reference circuits and precision bridge circuits.

- **Ratio Tolerance** - from 0.1% to 0.01%.
- **Ratio Temperature Coefficient** - 10 ppm/°C, 5 ppm/°C or 2 ppm/°C.
- **Absolute Temperature Coefficient** - 25 ppm/°C.
- **Ratio Stability of Resistance at Full Load for 2,000 hours** - within 0.01%.
- **Shelf Life Stability of Ratio for 6 Months** - within 0.005%.

Both the T912 and the T914 are available in 14 standard resistance values between 1,000 ohms and 1 Megohm. Caddock's high thru-put manufacturing capability assures that prototype and large-volume production quantities are available either from stock or within 6 weeks after receipt of order.



### Standard Type T912 and Type T914 Precision Resistor Networks

In addition to the 14 standard **equal value** models of the Type T912 and T914, the Type T912 can also be ordered with -

- **10:1 Resistance Ratio** - for use in amplifier gain-setting.
- **9:1 Resistance Ratio** - for use in voltage reference dividers.

### Specifications:

**Absolute Tolerance:** ±0.1% for all resistors.

**Absolute Temperature Coefficient:** ±25 ppm/°C referenced to +25°C, ΔR taken at 0°C and +70°C.

**Voltage Rating:** 30 volts DC or RMS AC applied to R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub>.

**Power Rating:** 0.10 watt applied to R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> (not to exceed rated voltage).

**Package Power Rating:** Type T912, 0.20 watt. Type T914, 0.40 watt.

**Storage Temperature:** -55°C to +105°C.

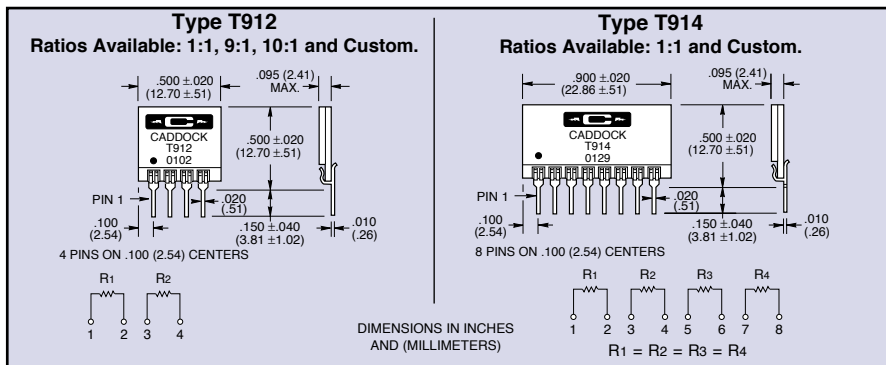
**Insulation Resistance Between Isolated Pins:** Pin 2 to Pin 3, Pin 4 to Pin 5, or Pin 6 to Pin 7, 1,000 Megohms, minimum.

**Dielectric Strength Between Isolated Pins:** 50 volts RMS AC.

**Ratio Stability Under Load:** Ratio change between any two resistors in the network under full load for 2,000 hours at +70°C, 0.01% maximum.

**Shelf Stability of Ratio:** Six months at shelf conditions, 50 ppm maximum.

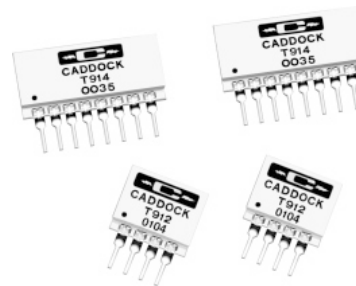
Ordering Information:		T912 - A 10K - 010 - 02	
Model Number		Ratio Temperature Track (0°C to +70°C):*	
Ratio Code Letter: *		-10 = 10 ppm/°C	-05 = 5 ppm/°C
			-02 = 2 ppm/°C
		Ratio Tolerance: *	
		-100 = 0.1%	-020 = 0.02%
			-050 = 0.05%
			-010 = 0.01%
		Standard Resistance Values: *(R <sub>1</sub> )	
		1K	10K
		40K	200K
		500K	1 Meg
		2K	20K
		50K	250K
		5K	25K
		100K	400K



### Custom Model T912 and T914 Precision Resistor Networks

For applications requiring non-standard resistance values, the T912 and T914 custom configurations can include these special features:

- Mixed resistance values with a maximum ratio of 250-to-1. (Example: 1.0 Megohm and 4 K)
- Absolute TC as low as 15 ppm/°C.
- Ratio TC as low as 2 ppm/°C.
- Custom voltage ratings.
- Matched resistors of any special value between 1 K and 2 Megohms.



Call or write our Applications Engineering for performance, price and availability of these custom resistor networks.

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