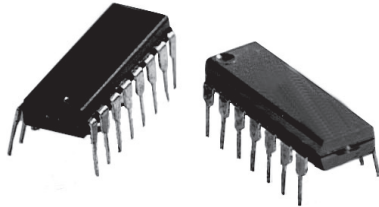


## Molded, Dual-In-Line Resistor Networks



Actual Size

Vishay Thin Film offers two standard circuits in a 14 and 16 pin molded dual-in-line over a 100 Ω to 100 kΩ resistance range. The networks feature ratio tolerance to 0.05 % with a TCR tracking of 5 ppm/°C.

### FEATURES

- Lead (Pb)-free available
- Standard Rugged, molded case construction (14 and 16 Pin)
- Highly stable thin film (500 ppm at + 70 °C at 2000 hours)
- Low temperature coefficient ( $\pm 25$  ppm/°C)
- Compatible with automatic insertion equipment
- Standard isolated pin one common schematic

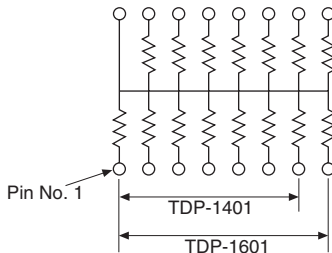


### TYPICAL PERFORMANCE

	ABS	TRACKING
TCR	25	5
	ABS	RATIO
TOL	0.1	0.05

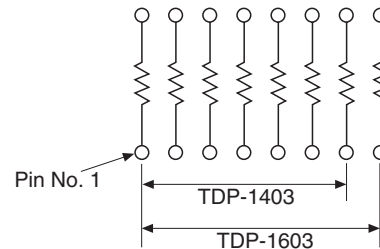
### SCHEMATIC

#### Schematic TDP01



Models: TDP1401 and TDP1601  
13 or 15 resistors with one pin common

#### Schematic TDP03



Models: TDP1403 and TDP1603  
7 or 8 isolated resistors

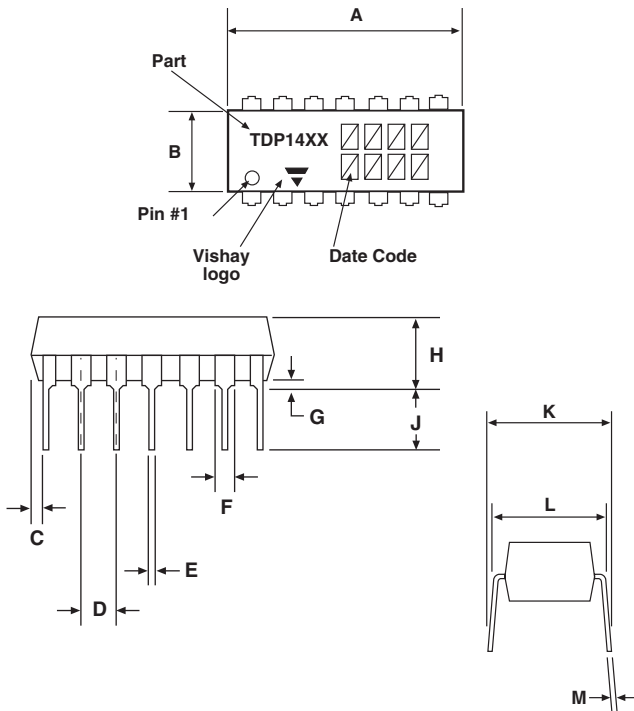
THROUGH HOLE NETWORKS

### STANDARD ELECTRICAL SPECIFICATIONS

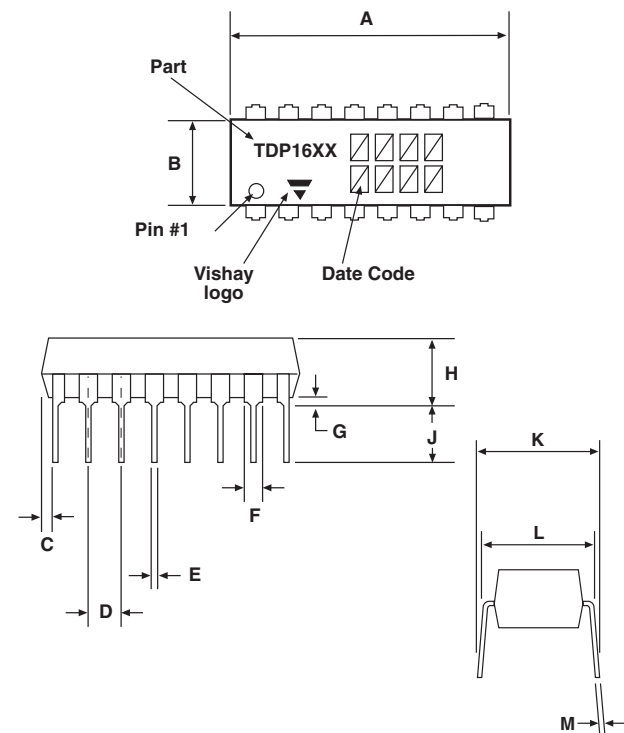
TEST	SPECIFICATIONS	CONDITIONS
Schematic	TDP01, TDP03	
Resistance Range	100 Ω to 100 kΩ	
TCR:	Ratio	$\pm 5$ ppm/°C
	Absolute	$\pm 25$ ppm/°C
Tolerance:	Ratio	$\pm 0.05$ % to $\pm 0.5$ %
	Absolute	$\pm 0.1$ %
Power Rating:	Resistor	01 Circuit = 0.05 W/resistor 03 Circuit = 0.10 W/resistor
	Package	0.8 W/package
Stability:	$\Delta R$ Absolute	500 ppm
	$\Delta R$ Ratio	150 ppm
Voltage Coefficient	< 1 ppm/V typical	
Working Voltage	100 V	
Operating Temperature Range	- 55 °C to + 125 °C	
Storage Temperature Range	- 55 °C to + 150 °C	
Noise	< - 30 dB	
Thermal EMF	0.08 $\mu$ V/°C	
Shelf Life Stability:	Absolute	100 ppm
	Ratio	20 ppm
		1 year at + 25 °C
		1 year at + 25 °C

\* Pb containing terminations are not RoHS compliant, exemptions may apply

**DIMENSIONS AND IMPRINTING** in inches and millimeters



DIMENSION	INCHES	MM
A	0.755	19.18
B	0.250	6.35
C	0.075	1.91
D	0.100	2.54
E	0.018	0.46
F	0.060	1.52
G	0.025	0.64
H	0.190	4.83
J	0.130	3.30
K	0.320	8.13
L	0.310	7.87
M	0.010	0.25



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MECHANICAL SPECIFICATIONS	
Resistive Element	Passivated Nichrome
Substrate Material	Silicon or Alumina
Body	Molded Epoxy
Terminals	Copper Alloy #42
Plating	Sn60
Marking Resistance to Solvents	Per MIL-PRF-83401
Lead (Pb)-free Option	100 % Sn Matte
Lead (Pb)-free Finish	Plated

GLOBAL PART NUMBER INFORMATION														
New Global Part Numbering: TDP14031002BUF (preferred part number format)														
T	D	P	1	4	0	3	1	0	0	2	B	U	F	
T	D	P	T	1	6	0	3	1	0	0	3	A	U	F
GLOBAL MODEL (3 or 4 digits)	PINS	SCHEMATIC	RESISTANCE	TOLERANCE AND RATIO TOLERANCE		PACKAGING								
TDP (Tin Lead)  TDPT (Lead(Pb)-free) (e3)	14  16	01 = 13 or 15 resistors with 1 common pin  03 = 7 or 8 isolated resistors	First 3 digits are significant figures and the last digit specifies the number of zeroes to follow.  Example: 1001 = 1K 1002 = 10K	Abs. Tol.      Ratio *A = ± 0.1 %    ± 0.05 % B = ± 0.1 %    ± 0.1 % C = ± 0.25 %   ± 0.1 % D = ± 0.5 %    ± 0.1 % F = ± 1 %       ± 0.5 %  * Tol. available on 1 kΩ and up only R1 is reference resistors		UF = TUBED								
Historical Part Number example: TDP14031001F (will continue to be accepted)														
TDP	14	03	1001	F										
SERIES	PINS	SCHEMATIC	RESISTANCE	TOLERANCE AND RATIO TOLERANCE										

THROUGH HOLE NETWORKS



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