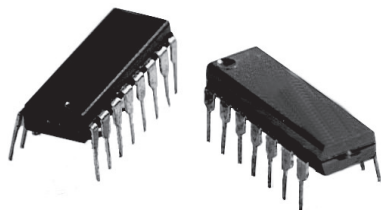


Molded, Dual-In-Line Resistor Networks

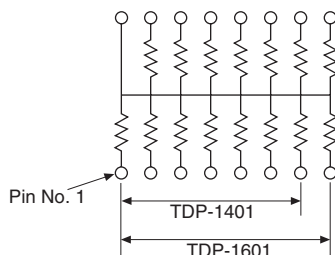


Actual Size

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

SCHEMATIC

Schematic TDP01



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

FEATURES

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

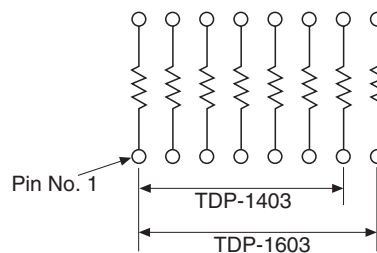


RoHS*
COMPLIANT

TYPICAL PERFORMANCE

	ABS	TRACKING
TCR	25	5
	ABS	RATIO
TOL	0.1	0.05

Schematic TDP03



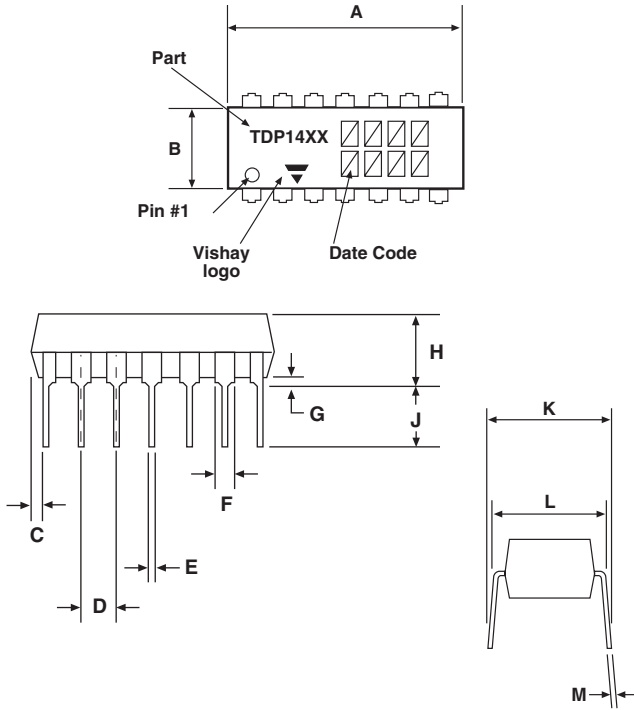
Models: TDP1403 and TDP1603
7 or 8 isolated resistors

STANDARD ELECTRICAL SPECIFICATIONS

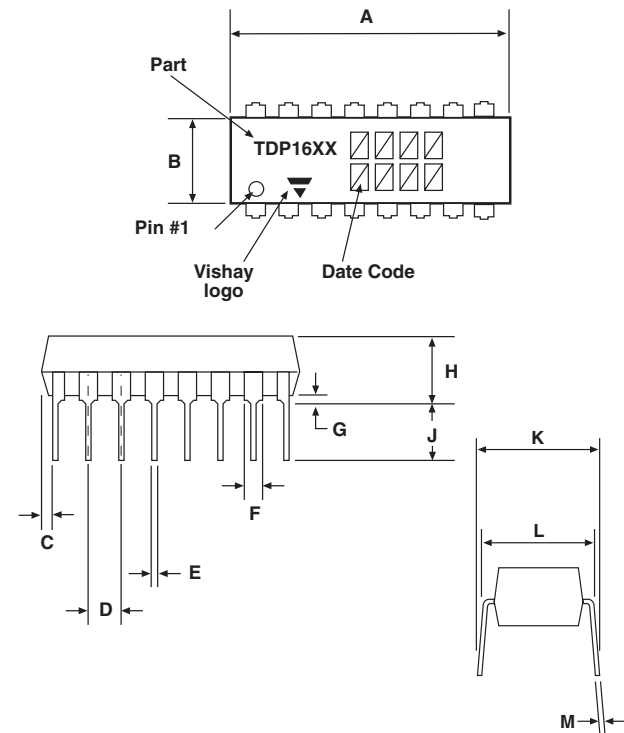
TEST	SPECIFICATIONS	CONDITIONS
Schematic	TDP01, TDP03	
Resistance Range	100 Ω to 100 k Ω	
TCR:	Ratio	± 5 ppm/ $^{\circ}$ C
	Absolute	± 25 ppm/ $^{\circ}$ C
Tolerance:	Ratio	± 0.05 % to ± 0.5 %
	Absolute	± 0.1 %
Power Rating:	Resistor	01 Circuit = 0.05 W/resistor 03 Circuit = 0.10 W/resistor
	Package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

* 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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M	0.010	0.25

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)**14****01** = 13 or 15
resistors with
1 common pinFirst 3 digits are
significant figures and
the last digit specifies
the number of zeroes
to follow.

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 %

UF = TUBED**TDPT**
(Lead(Pb)-free)
(e3)**16****03** = 7 or 8
isolated resistorsExample:
1001 = 1K
1002 = 10K* Tol. available on 1 kΩ
and up only R1 is
reference resistors

Historical Part Number example: TDP14031001F (will continue to be accepted)

TDP**14****03****1001****F**

SERIES

PINS

SCHEMATIC

RESISTANCE

TOLERANCE AND
RATIO TOLERANCE



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