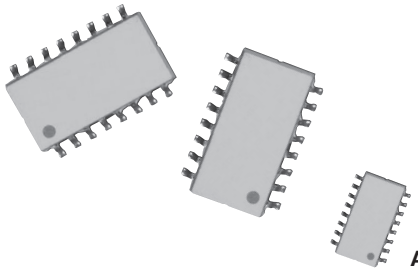
Molded, 50 mil Pitch, Dual-In-Line Thin Film Resistor, Surface Mount Network



Actual Size

FEATURES

- 0.090" (2.29 mm) maximum seated height
- Rugged, molded case construction (0.22" wide)
- Highly stable thin film ratio stability (ΔR ± 0.015 % at 70 °C for 2000 h)
- Low temperature coefficient, ± 25 ppm/°C (-55 °C to +125 °C)
- Wide resistance range 100 Ω to 100 kΩ
- Isolated / bussed circuits
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free Available

RoHS* Available

HALOGEN FREE

Note

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details

LINKS TO ADDITIONAL RESOURCES

Product Page | Packages | Footprints | Order Samples

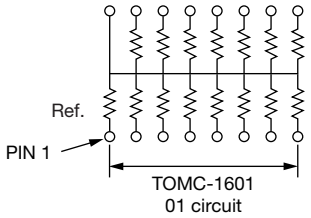
Vishay Dale Thin Film offers standard circuits in 16 pins in a medium body molded surface mount package. The networks are available over a resistance range of 100 Ω to 100 kΩ. The network features tight ratio tolerances and close TCR tracking. In addition to the standards shown, custom circuits are available upon request.

ATTENTION!
Observe Precautions for Handling Electrostatic Sensitive Devices!

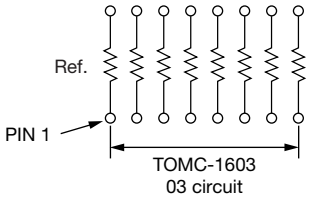
TYPICAL PERFORMANCE

	ABSOLUTE	TRACKING
TCR	25	5
	ABSOLUTE	RATIO
TOL.	0.1	0.025

SCHEMATIC



The 01 circuit provides 15 nominally equal resistors, each connected between a common lead (16) and a discrete PC board pin.



The 03 circuit provides a choice of 8 nominally equal resistors with each resistor isolated from all others and wired directly across.

STANDARD ELECTRICAL SPECIFICATIONS

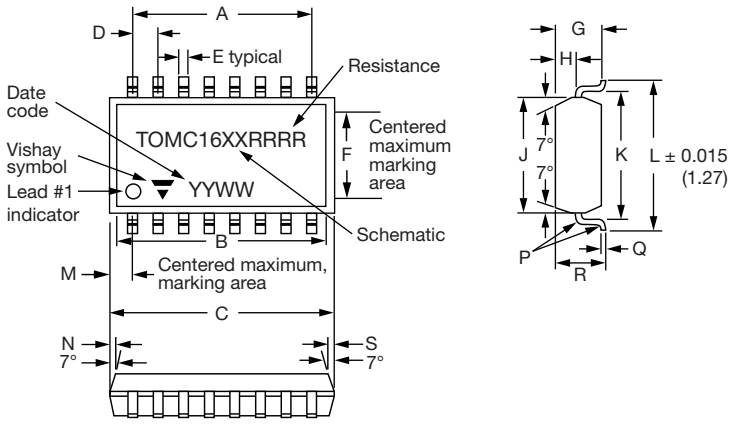
TEST	SPECIFICATIONS	CONDITIONS
Material	Passivated nichrome	-
Pin / lead number	16	-
Resistance range	100 Ω to 100 kΩ per resistor	-
TCR: absolute	± 25 ppm/°C	-55 °C to +125 °C
TCR: tracking	± 5 ppm/°C	-55 °C to +125 °C
Tolerance: absolute	± 0.1 % to ± 1 %	+25 °C
Tolerance: ratio	± 0.025 % to ± 0.5 %	+25 °C
Power rating: resistor	50 mW = PIN 16 common 100 mW = isolated	Maximum at +70 °C
Power rating: package	750 mW	Maximum at +70 °C
Stability: absolute	ΔR ± 0.05 %	2000 h at +70 °C
Stability: ratio	ΔR ± 0.015 %	2000 h at +70 °C
Voltage coefficient	0.1 ppm/V	-
Working voltage	100 V max. not to exceed $\sqrt{P} \times R$	-
Operating temperature range	-55 °C to +125 °C	-
Storage temperature range	-55 °C to +150 °C	-
Noise	< -30 dB	-
Thermal EMF	0.08 µV/°C	-
Shelf life stability: absolute	ΔR ± 0.01 %	1 year at +25 °C
Shelf life stability: ratio	ΔR ± 0.002 %	1 year at +25 °C

For technical questions, contact: thinfilm@vishay.com

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DIMENSIONS AND IMPRINTING in inches and millimeters



DIMENSION	INCHES	MILLIMETERS
A	0.350	8.89
B	0.400	10.16
C	0.440	11.176
D	0.050	1.27
E	0.018	0.457
F	0.160	4.06
G	0.08	2.03
H	0.036	0.914
J	0.22	5.59
K	0.244	6.20
L	0.30	7.52
M	0.045	1.14
N	0.003	0.076
P	0.005	1.27
Q	0.008	0.203
R	0.085	2.16
S	0.003	0.076

Note

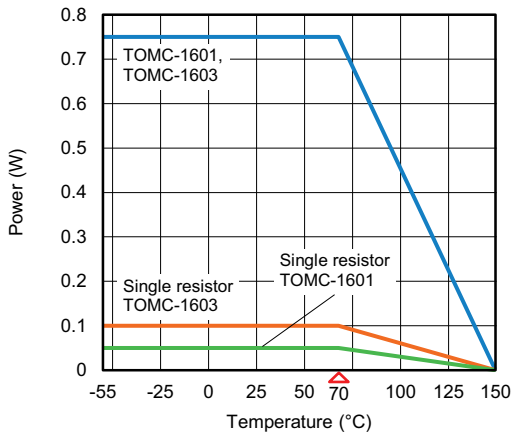
- The tolerance and package code is NOT a member of the part marking.
  For space considerations the part number may be broken up, i. e.:

  TOMC1603
  ▼ 1002
  ○ YYWW

MECHANICAL SPECIFICATIONS

Resistive element	Passivated nichrome
Substrate material	High purity alumina
Body	Molded epoxy
Terminals	Copper alloy
Lead (Pb)-free option	100 % matte tin
Tin lead option	Sn85
Tin lead and lead (Pb)-free finish	Plated

DERATING CURVE



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GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: TOMC16031002BUF

T	O	M	C	1	6	0	3	1	0	0	2	B	U	F
T	O	M	C	T	1	6	0	1	1	0	0	3	Z	T	1

GLOBAL MODEL (4 or 5 digits)	PINS	SCHEMATIC	RESISTANCE	TOLERANCE AND RATIO TOLERANCE		PACKAGING
				Abs. tol.	Ratio	
TOMC (Tin lead) **TOMCT** (Lead (Pb)-free) (e3)	**16**	**01** = 15 bussed equal resistors **03** = 8 isolated equal resistors	First 3 digits are significant figures and the last digit specifies the number of zeros to follow. Example: 1002 = 10K 1003 = 100K	**A** = 0.1 % (1) **B** = 0.1 % **C** = 0.25 % **D** = 0.5 % **F** = 1 % **Z** = 0.1 % (2)	0.05 % 0.1 % 0.1 % 0.1 % 0.5 % 0.025 %	TAPE AND REEL **T0** = 100 min., 100 mult. **T1** = 1000 min., 1000 mult. (3) **T3** = 300 min., 300 mult. **T5** = 500 min., 500 mult. **TF** = full reel 2000 **TS** = 100 min., 1 mult. **UF** = TUBED

Historical Part Number Example: TOMC16011002Z (for reference purposes only)

TOMC	16	01	1002	Z
SERIES	NUMBER OF LEADS	SCHEMATIC	RESISTANCE	TOLERANCE AND RATIO TOLERANCE

Notes

(1) Tolerance available 250 and up
(2) Tolerance available 1K and up
(3) Preferred packaging code

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