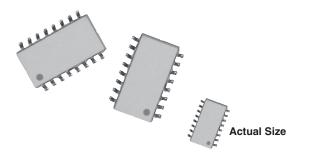
## Vishay Dale Thin Film

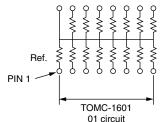




www.vishay.com

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  $\Omega$  to 100 k $\Omega$ . The network features tight ratio tolerances and close TCR tracking. In addition to the standards shown, custom circuits are available upon request.

#### SCHEMATIC



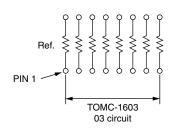
The 01 circuit provides 15 nominally equal resistors, each connected between a common lead (16) and a discrete PC board pin.

### **FEATURES**

- 0.090" (2.29 mm) maximum seated height • Rugged, molded case construction (0.22" wide)
- · Highly stable thin film ratio stability ( $\Delta R \pm 0.015$  % at 70 °C for 2000 h)
- Low temperature coefficient, ± 25 ppm/°C (- 55 °C to + 125 °C)
- Wide resistance range 100  $\Omega$  to 100 k $\Omega$
- Isolated/bussed circuits
- · Material categorization: For definitions of compliance please see www.vishay.com/doc?99912
- Note Lead (Pb)-containing terminations are not RoHS-compliant. Exemptions may apply.

#### **TYPICAL PERFORMANCE**

$\bullet$	ABSOLUTE	TRACKING
TCR	25	5
	ABSOLUTE	RATIO
TOL.	0.1	0.025



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 $\Omega$ to 100 k $\Omega$ 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	Maximum at + 70 °C
	100 mW = isolated	
Power Rating: Package	750 mW	Maximum at + 70 °C
Stability: Absolute	$\Delta R \pm 0.05 \%$	2000 h at + 70 °C
Stability: Ratio	∆ <i>R</i> ± 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	$\Delta R \pm 0.01 \%$	1 year at + 25 °C
Shelf Life Stability: Ratio	Δ <i>R</i> ± 0.002 %	1 year at + 25 °C

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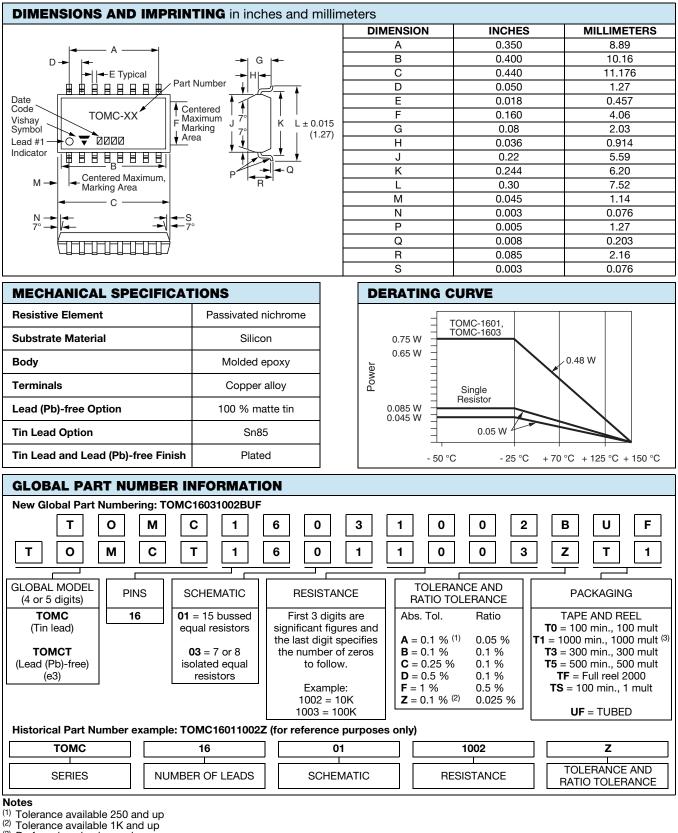
RoHS COMPLIANT

HALOGEN FREE

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## Vishay Dale Thin Film



<sup>(3)</sup> Preferred packaging code

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