# TOMC

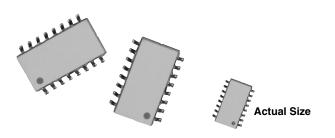
SURFACE MOUNT NETWORKS

Vishay Thin Film



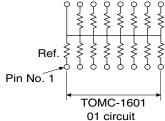
RoHS

## Molded, 50 Mil Pitch Resistor Networks



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

#### SCHEMATIC



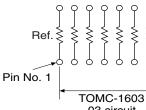
The 01 circuit provides 15 nominally equal resistors, each connected between a common lead (16) and a discrete PC board pin.

### **FEATURES**

- Lead (Pb)-free available
- 0.090" (2.29 mm) maximum seated height
- Rugged, molded case construction (0.22" wide)
- Highly stable thin film (500 ppm at 70 °C, COMPLIANT 10 000 hours)
- Low temperature coefficient, ± 25 ppm/°C (- 55 °C to + 125 °C)
- Wide resistance range 100  $\Omega$  to 100 k $\Omega$

#### **TYPICAL PERFORMANCE**

| $\bullet$ | ABS | TRACKING |  |
|-----------|-----|----------|--|
| TCR       | 25  | 5        |  |
|           | ABS | 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.



| TEST<br>PIN NUMBER<br>Resistance Range |             | SPECIFICATIONS                         | CONDITION            |  |
|--|-------------|--|----------------------|--|
|  |             | 16                                     |                      |  |
|  |             | 100 Ohms to 100K Ohms                  |                      |  |
| TCR:                                   | Tracking    | ± 5 ppm/°C                             | - 55 °C to + 125 °C  |  |
|  | Absolute    | ± 25 ppm/°C                            | - 55 °C to + 125 °C  |  |
| Tolerance:                             | Ratio       | ± 0.5 %, ± 0.1 %, ± 0.05 %, ± 0.025 %  | + 25 °C              |  |
|  | Absolute    | ± 0.1 %, ± 0.5 %, ± 0.25 %, ± 0.1 %    | + 25 °C              |  |
| Power Rating:                          | Resistor    | Pin 1 Common = 50 mW Isolated = 100 mW | Max. at + 70 °C      |  |
|  | Package     | 750 mW                                 | Max. at + 70 °C      |  |
| Stability:                             | ∆R Absolute | 500 ppm                                | 2000 hrs at + 70 °C  |  |
|  | ∆R Ratio    | 150 ppm                                | 2000 hrs. at + 70 °C |  |
| Voltage Coefficient                    |             | 0.1 ppm/Volt                           |                      |  |
| Working Voltage                        |             | 50 Volts                               |                      |  |
| 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                             |                      |  |
| Absolute                               |             | 100 ppm                                | 1 year at + 25 °C    |  |
| Shelf Life Stabilit                    | Ratio       | 20 ppm                                 | 1 year at + 25 °C    |  |

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

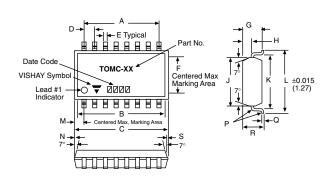


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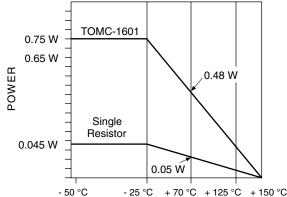
# Vishay Thin Film

томс

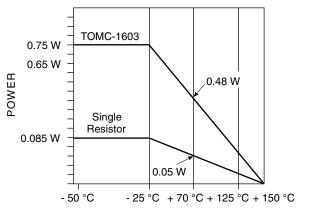
### DIMENSIONS AND IMPRINTING in inches and millimeters

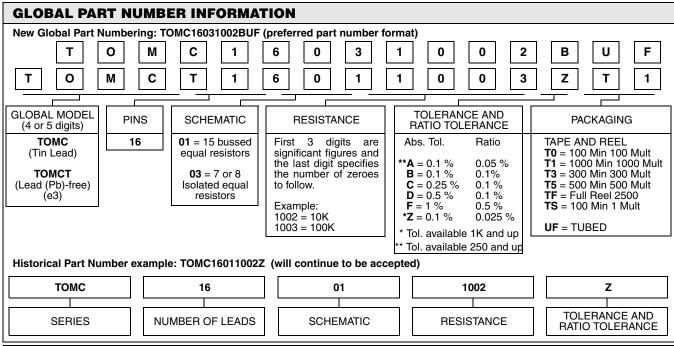


#### **DERATING CURVES**



|      |          | II    | NCHES                         |       | MM              |  |
|------|----------|-------|-------------------------------|-------|-----------------|--|
| D    |          |       | 0.050                         |       | 1.27            |  |
| E    |          |       | 0.018                         |       | 0.457           |  |
| F    |          |       | 0.160                         |       | 4.06            |  |
| G    |          |       | 0.08                          |       | 2.03            |  |
| Н    |          |       | 0.036                         |       | 0.914           |  |
| J    |          |       | 0.22                          |       | 5.59            |  |
| К    |          |       | 0.244                         | 6.20  |                 |  |
| L    |          | 0.30  |                               | 7.52  |                 |  |
| М    |          |       | 0.045                         | 1.14  |                 |  |
| N    |          | 0.003 |                               | 0.076 |                 |  |
| Р    |          | 0.005 |                               | 1.27  |                 |  |
| Q    |          | 0.008 |                               | 0.203 |                 |  |
| R    |          |       | 0.085                         |       | 2.16            |  |
| S    |          |       | 0.003 0.076                   |       |                 |  |
| TYPE | A        |       | В                             |       | С               |  |
|      |          |       |                               | 0)    | -               |  |
| 16   | 0.350" ( | 8.89) | 0.400" (10.16) 0.440" (11.17) |       | 0.440" (11.176) |  |







Vishay

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