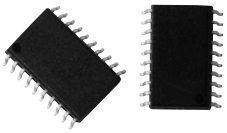
# WOMC

Vishay Thin Film

# Molded, 50 Mil Pitch, Dual In-Line Resistor Networks, Wide Body



Actual Size
20 Pin

## FEATURES

- Lead (Pb)-free available
- Standard 16 and 20 Pin Counts (0.300" Wide Body) JEDEC MS-013
- Rugged, molded case construction
- High stable thin film element (500 ppm at + 70 °C, 10 000 hrs.)
- Leads copper alloy, solderable

Pb-free Available

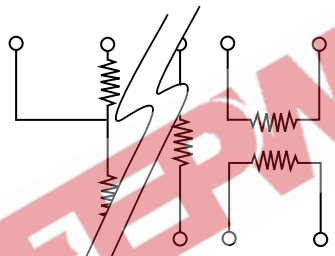
RoHS* COMPLIANT

The WOMC series features a standard 16 and 20 pin wide body (0.30") small outline surface mount style that can accommodate resistor networks to your particular application requirements. The networks can be constructed with Tamelox, or Tantalum Nitride resistor films to optimize performance.

## TYPICAL PERFORMANCE

| | ABS | TRACKING |
|---|---|---|
| TCR | 25 | 5 |
| | ABS | RATIO |
| TOL | 0.1 | 0.05 |

## SCHEMATIC



Custom schematics available
Please consult factory



## STANDARD ELECTRICAL SPECIFICATIONS

| TEST | | SPECIFICATIONS | CONDITION |
|---|---|---|---|
| PIN NUMBER | | 16, 20 | |
| Resistance Range | | 100 Ohms to 500K Ohms total | |
| TCR: | Tracking | ± 5 ppm/°C typical | - 55 °C to + 125 °C |
| | Absolute | ± 50 ppm/°C to 25 ppm/°C | - 55 °C to + 125 °C |
| Tolerance: | Ratio | ± 0.1 % to ± 0.05 % | + 25 °C |
| | Absolute | ± 1.0 % to ± 0.1 % | + 25 °C |
| Power Rating: | Resistor | 50 mW per element | Max. at + 70 °C |
| | Package | 500 mW 1.0 Watt | Max. at + 70 °C |
| Stability: | ΔR Absolute | 500 ppm | 2000 hrs at + 70 °C |
| | ΔR 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 | |
| Shelf Life Stability: | Absolute | 100 ppm | 1 year ratio at + 25 °C |
| | Ratio | < 20 ppm | 1 year ratio at + 25 °C |

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

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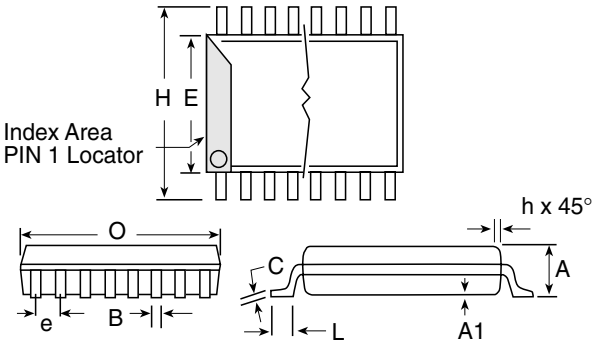
## DIMENSIONS AND IMPRINTING in inches and millimeters




| | 16 | | 20 | |
|---|---|---|---|---|
| | INCHES | MM | INCHES | MM |
| H | 0.408 | 10.36 | 0.408 | 10.36 |
| E | 0.298 | 7.57 | 0.298 | 7.57 |
| O | 0.410 | 10.41 | 0.500 | 12.7 |
| A | 0.097 | 2.46 | 0.097 | 2.46 |
| e | 0.050 | 1.27 | 0.050 | 1.27 |
| B | 0.016 | 0.406 | 0.016 | 0.406 |
| C | 0.009 | 0.228 | 0.009 | 0.228 |
| L | 0.026 | 0.66 | 0.026 | 0.66 |
| $A_1$ | 0.007 | 0.177 | 0.007 | 0.177 |
| h | 0.015 | 0.381 | 0.015 | 0.381 |

| MECHANICAL SPECIFICATIONS | |
|---|---|
| Resistive Material | Tamelox or Tantalum Nitride |
| Body | Molded Epoxy |
| Plating | Solder |
| Marking Resistance to Solvents | Per MIL-PRF-83401 |
| Substrate Material | Silicon |
| Terminals | Copper |
| Lead Coplanarity | ± 0.004 |
| Lead (Pb)-free Option | 100 % Sn Matte** |
| Lead (Pb)-free Finish | Plated |

## ORDERING INFORMATION CHECK LIST (CUSTOMS)

Special requirements should be identified in advance, but as a minimum, you should have the following information ready.

| ELECTRICAL | MECHANICAL |
|---|---|
| 1. Resistors, by value and tolerance<br>2. Reference resistor(s) and matching of which resistors to which reference resistors<br>3. Reference by ratio<br>4. Absolute temperature coefficient of resistivity<br>5. Temperature tracking of subordinate resistors to reference resistor(s)<br>6. Maximum operating voltage<br>7. Resistor power ratings<br>8. Operating temperature range | 1. Maximum allowable seated height (from PC board to top of network)<br>2. Special marking concerns<br>3. Schematic pin out of package<br>4. Specify if lead (Pb)-free |

**Lead (Pb)-free example:** WOMCTXXXXA

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## GLOBAL PART NUMBER INFORMATION

**New Global Part Numbering: WOMC1xx-xxxT1 (preferred part number format)**

| W | O | M | C | 1 | x | x | - | x | x | x | - | x | T | 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| GLOBAL MODEL (4 or 5 digits) | CUSTOM PART NUMBER (7 or 9 digits) | PACKAGING |
|---|---|---|
| **WOMC** (Tin Lead)<br>**WOMCT** (Lead (Pb)-free) (e3) | **1xx-xxx** or **1xx-xxx-x** | TAPE AND REEL<br>**T0** = 100 Min 100 Mult<br>**T1** = 1000 Min 1000 Mult<br>**T3** = 300 Min 300 Mult<br>**T5** = 500 Min 500 Mult<br>**TF** = Full Reel 2500<br>**TS** = 100 Min 1 Mult<br>**UF** = TUBED |

**Historical Part Number example: WOMC1xx-xxxA (will continue to be accepted)**

| WOMC | 1xx-xxx | A |
|---|---|---|
| SERIES | CUSTOM PART NUMBER | TOLERANCE |

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