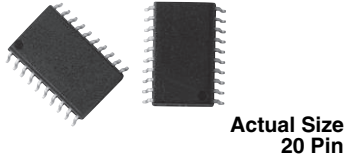


# Molded, 50 mil Pitch, Dual In-Line Thin Film Resistor, Wide Body, Surface Mount Network



The WOMC series features a standard 16 pins and 20 pins 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 passivated nichrome, or tantalum nitride resistor films to optimize performance.

## FEATURES

- Standard 16 pins and 20 pins counts (0.300" wide body) JEDEC MS-013 variation AA and AC
- Rugged, molded case construction
- High stable in element ratio stability ( $\Delta R \pm 0.015\%$  at 70 °C for 2000 h)
- Leads copper alloy, solderable
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition



**RoHS\***  
COMPLIANT  
HALOGEN  
**FREE**

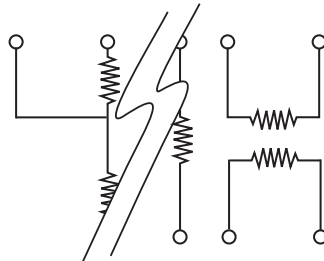
## Note

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

## TYPICAL PERFORMANCE

	ABSOLUTE	TRACKING
TCR	25	5
	ABSOLUTE	RATIO
TOL.	0.1	0.05

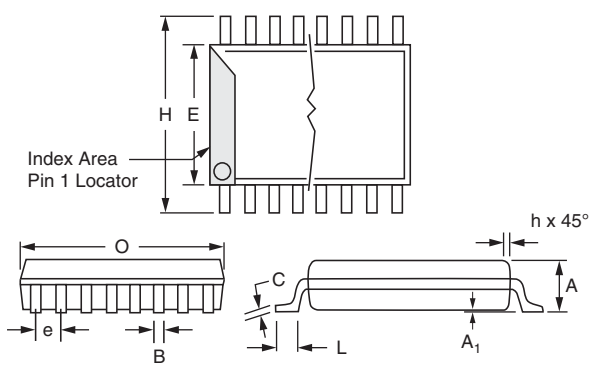
## SCHEMATIC



Custom schematics available  
Please contact factory

STANDARD ELECTRICAL SPECIFICATIONS		
TEST	SPECIFICATIONS	CONDITIONS
Material	Passivated nichrome or tantalum nitride	-
Pin/Lead Number	16, 20	-
Resistance Range	100 $\Omega$ to 500 k $\Omega$ total resistance	-
TCR: Absolute	$\pm 25$ ppm/ $^{\circ}$ C to $\pm 50$ ppm/ $^{\circ}$ C	- 55 $^{\circ}$ C to + 125 $^{\circ}$ C
TCR: Tracking	$\pm 5$ ppm/ $^{\circ}$ C (typical)	- 55 $^{\circ}$ C to + 125 $^{\circ}$ C
Tolerance: Absolute	$\pm 0.1\%$ to $\pm 1.0\%$	+ 25 $^{\circ}$ C
Tolerance: Ratio	$\pm 0.05\%$ to $\pm 0.1\%$	+ 25 $^{\circ}$ C
Power Rating: Resistor	100 mW (per element)	Maximum at + 70 $^{\circ}$ C
Power Rating: Package	500 mW	Maximum at + 70 $^{\circ}$ C
Stability: Absolute	$\Delta R \pm 0.05\%$	2000 h at + 70 $^{\circ}$ C
Stability: Ratio	$\Delta R \pm 0.015\%$	2000 h at + 70 $^{\circ}$ C
Voltage Coefficient	0.1 ppm/V	-
Working Voltage	100 V max. not to exceed $\sqrt{P \times R}$	-
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 $\mu$ V/ $^{\circ}$ C	-
Shelf Life Stability: Absolute	$\Delta R \pm 0.01\%$	1 year at + 25 $^{\circ}$ C
Shelf Life Stability: Ratio	$\Delta R \pm 0.002\%$	1 year at + 25 $^{\circ}$ C

<b>DIMENSIONS AND IMPRINTING</b> in inches and millimeters				
DIMENSION	16		20	
	INCHES	MILLIMETERS	INCHES	MILLIMETERS
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 <sub>1</sub>	0.007	0.177	0.007	0.177
h	0.015	0.381	0.015	0.381



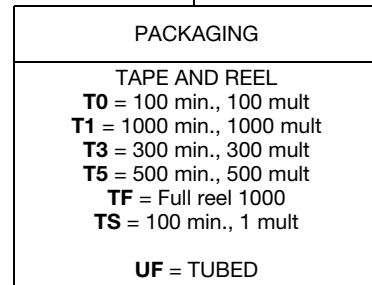
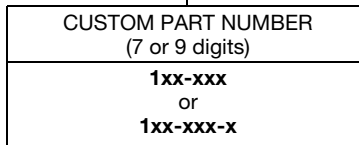
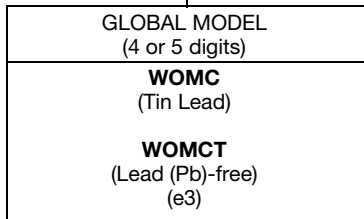
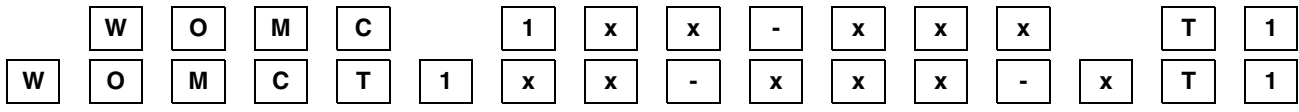
<b>MECHANICAL SPECIFICATIONS</b>	
Resistive Element	Passivated nichrome
Substrate Material	Silicon
Body	Molded epoxy
Terminals	Copper alloy
Lead (Pb)-free Option	100 % matte tin
Tin Lead Option	Sn90
Tin Lead and Lead (Pb)-free Finish	Plated

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

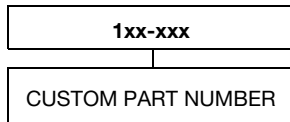


**GLOBAL PART NUMBER INFORMATION**

New Global Part Numbering: WOMC1xx-xxxT1



Historical Part Number example: 1xx-xxx (for reference purposes only)





## **Disclaimer**

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.