

Vishay Dale Thin Film

# 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



COMPLIANT

HALOGEN

FREE

- 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

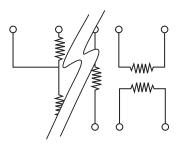
#### Note

\* 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**



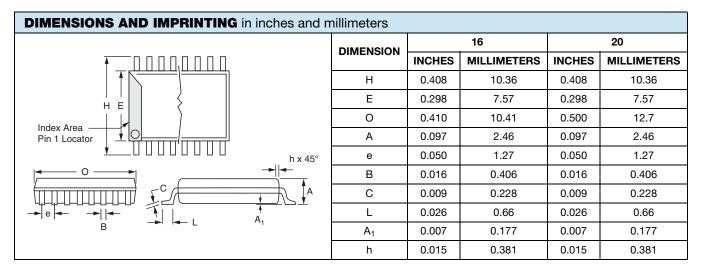
Custom schematics available Please contact factory

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	± 25 ppm/°C to ± 50 ppm/°C	- 55 °C to + 125 °C
TCR: Tracking	± 5 ppm/°C (typical)	- 55 °C to + 125 °C
Tolerance: Absolute	± 0.1 % to ± 1.0 %	+ 25 °C
Tolerance: Ratio	± 0.05 % to ± 0.1 %	+ 25 °C
Power Rating: Resistor	100 mW (per element)	Maximum at + 70 °C
Power Rating: Package	500 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	<del>-</del>
Working Voltage	100 V max. not to exceed √P x R	-
Operating Temperature Range	- 55 °C to + 125 °C	-
Storage Temperature Range	- 55 °C to + 150 °C	<del>-</del>
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

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MECHANICAL SPECIFICATIONS		
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	

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 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	Maximum allowable seated height (from PC board to top of network)     Special marking concerns     Schematic pin out of package     Specify if lead (Pb)-free			





www.vishay.com

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GLOBAL PART NUMBER INFORMATION				
New Global Part Numbering: WOMC1xx	-xxxT1  1			
GLOBAL MODEL (4 or 5 digits)  WOMC (Tin Lead)  WOMCT (Lead (Pb)-free) (e3)	CUSTOM PART NUMBER (7 or 9 digits)  1xx-xxx or 1xx-xxx-x  TAPE AND REEL T0 = 100 min., 100 mult T1 = 1000 min., 1000 mult T3 = 300 min., 300 mult T5 = 500 min., 500 mult TF = Full reel 1000 TS = 100 min., 1 mult  UF = TUBED			
Historical Part Number example: 1xx-xx	x (for reference purposes only)  1xx-xxx  CUSTOM PART NUMBER			

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