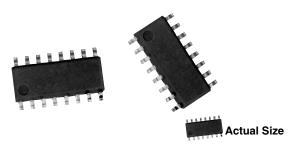
FREE



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



The NOMC series features a standard 14 pins and 16 pins narrow body (0.150") small outline surface mount style. It can accommodate resistor networks to your particular application requirements. The networks can be constructed with passivated nichrome (standard), or tantalum nitride <sup>(1)</sup> resistor films to optimize performance.

#### Note

(1) Available upon request. Resistance value range and performance differs from passivated nichrome standard electrical specifications on datasheet, consult factory.

### **FEATURES**

- Standard 14 pins and 16 pins counts (0.150" narrow body) JEDEC MS-012 variation AB and AC
- Rugged molded case construction
- Excellent long term ratio stability (ΔR ± 0.015 %)
- Low TCR tracking ± 5 ppm/°C
- · Isolated and bussed schematics
- Material categorization: For definitions of compliance please see <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>

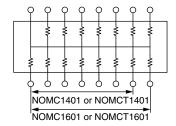
#### Note

\* This datasheet provides information about parts that are RoHS-compliant and/or parts that are non-RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information/tables in this datasheet for details.

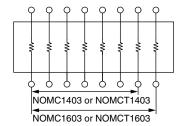
### TYPICAL PERFORMANCE

	ABSOLUTE	TRACKING
TCR	25	5
	ABSOLUTE	RATIO
TOL.	0.10	0.05

### **SCHEMATICS**



The 01 circuit provides a choice of 13 or 15 equal value resistors each connected between a common lead (14 or 16). Custom schematics available.



The 03 circuit provides a choice of 7 or 8 equal value resistors each connected between a common lead (14 or 16). Custom schematics available.

STANDARD RESISTANCE OFFERING (Equal Value Resistors)		
ISOLATED (03) SCHEMATIC	BUSSED (01) SCHEMATIC	
1 kΩ	1 kΩ	
2 kΩ	5 kΩ	
5 kΩ	10 kΩ	
10 kΩ	20 kΩ	
20 kΩ		
25 kΩ		
50 kΩ		
100 kΩ		

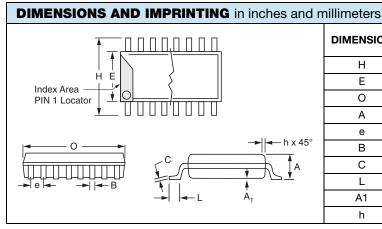
### Note

· Consult factory for additional values



# Vishay Dale Thin Film

STANDARD ELECTRICAL SPECIFICATIONS			
TEST	SPECIFICATIONS	CONDITIONS	
Material	Passivated nichrome (standard) Tantalum nitride (available upon request)	-	
Pin/Lead Number	14, 16	-	
Barista and Baras	100 $\Omega$ to 50 k $\Omega$ each resistor (bussed (01) schematic)	-	
Resistance Range	100 $\Omega$ to 100 k $\Omega$ each resistor (isolated (03) schematic)	-	
TCR: Absolute	± 25 ppm/°C (standard)	- 55 °C to + 125 °C	
TCR: Tracking	± 5 ppm/°C (typical)	- 55 °C to + 125 °C	
Tolerance: Absolute	± 0.10 % to ± 1 %	+ 25 °C	
Tolerance: Ratio	± 0.025 % to ± 0.1 %	+ 25 °C	
Power Rating: Resistor	100 mW ((typical) (03) schematic)	Maximum at + 70 °C	
	50 mW ((01) schematic)		
Power Rating: Package	400 mW/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	-	
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	-	
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	



DIMENSION	14		16	
DIMENSION	INCHES	MILLIMETERS	INCHES	MILLIMETERS
Н	0.235	5.969	0.235	5.969
E	0.154	3.911	0.154	3.91
0	0.340	8.363	0.390	9.906
Α	0.063	1.60	0.063	1.60
е	0.050	1.270	0.050	1.270
В	0.015	0.381	0.015	0.381
С	0.008	0.203	0.008	0.203
L	0.025	0.635	0.025	0.635
A1	0.006	0.152	0.006	0.152
h	0.015	0.381	0.015	0.381

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	

### Note

 Available upon request. Resistance value range and performance differs from passivated nichrome standard electrical specifications on datasheet, consult factory.



# Vishay Dale Thin Film

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		

GLOBAL PAR	GLOBAL PART NUMBER INFORMATION			
New Global Part I	New Global Part Numbering: NOMC16031002BUF			
N O	O N	( C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 0 3	1 0 0 2 B U F 1 0 0 3 Z T 1
GLOBAL MODEL (4 or 5 digits)	PINS	SCHEMATIC	RESISTANCE	TOLERANCE AND PACKAGING PACKAGING
NOMC (Tin Lead) NOMCT (Lead (Pb)-free) (e3)	14 16	01 = 13 or 15 bussed equal value resistors 03 = 7 or 8 isolated equal value resistors	First 3 digits are significant figures and the last digit specifies the number of zeros to follow.  Example: 1002 = 10K 1003 = 100K	Abs. Tol. Ratio $A = 0.1 \% \ ^{(1)}  0.05 \%$ $B = 0.1 \%  0.1 \%$ $C = 0.25 \%  0.1 \%$ $D = 0.5 \%  0.1 \%$ $F = 1 \%  0.5 \%$ $Z = 0.1 \% \ ^{(1)}  0.025 \%$ TAPE AND REEL  T0 = 100 min., 1000 mult $^{(2)}$ T3 = 300 min., 300 mult  T5 = 500 min., 500 mult  TF = Full reel 2500  TS = 100 min., 1 mult  UF = TUBED
Historical Part Number example: NOMC16031002Z (for reference purposes only)				
NOMC		16	03	1002 Z
SERIES		PINS	SCHEMATIC	RESISTANCE TOLERANCE AND RATIO TOLERANCE

### Notes

- (1) Tolerance available 1K and up
- (2) Preferred packaging code



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