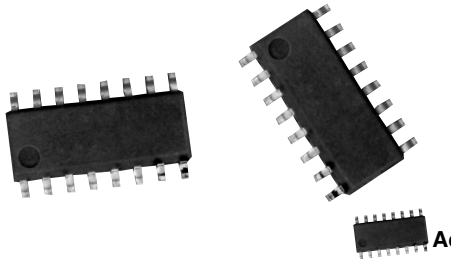
NOMC

Vishay Thin Film

Molded, 50 Mil Pitch, Dual-In-Line Resistor Network Narrow Body



Actual Size

The NOMC series features a standard 14 and 16 pin 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 [1] 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

- Lead (Pb)-free available
- Standard 14 and 16 pin counts (0.150" Narrow Body) JEDEC MS-012
- Rugged molded case construction
- Stable thin film element (500 ppm at + 70 °C at 2000 h)
- Low temperature coefficient (± 25 ppm/°C)

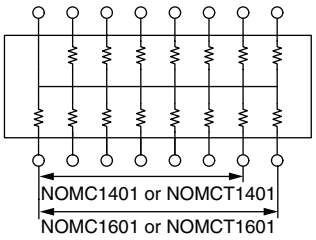
Pb-free Available

RoHS* COMPLIANT

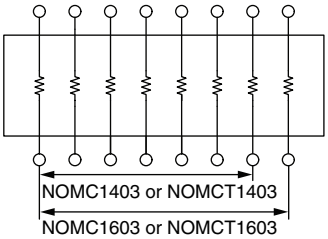
TYPICAL PERFORMANCE

	ABS	TRACKING
TCR	25	5
	ABS	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	10 kΩ
2 kΩ	20 kΩ
5 kΩ	
10 kΩ	
20 kΩ	
100 kΩ	

Consult factory for additional values

STANDARD ELECTRICAL SPECIFICATIONS

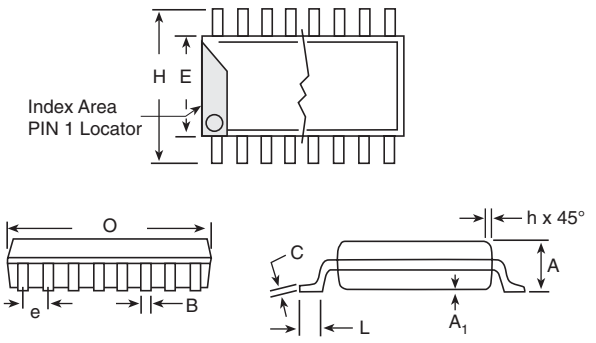
TEST		SPECIFICATIONS	CONDITIONS
Pin Number		14, 16	
Resistance Range	Bussed (01) Schematic	100 Ω to 50 kΩ each resistor	
	Isolated (03) Schematic	100 Ω to 100 kΩ each resistor	
TCR	Tracking	± 5 ppm/°C typical	- 55 °C to + 125 °C
	Absolute	± 25 ppm/°C standard	- 55 °C to + 125 °C

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

For technical questions, contact: thin-film@vishay.com

STANDARD ELECTRICAL SPECIFICATIONS			
TEST		**SPECIFICATIONS**	**CONDITIONS**
Tolerance	**Ratio**	± 0.1 % to ± 0.025 %	+ 25 °C
	Absolute	± 1.0 % to ± 0.10 %	+ 25 °C
Power Rating	**Resistor**	50 mW per element typical	Max. at + 70 °C
	Package	400 mW 500 mW	Max. at + 70 °C
Stability	**ΔR Absolute**	500 ppm	2000 h at + 70 °C
	ΔR Ratio	150 ppm	2000 h at + 70 °C
Voltage Coefficient		< 0.1 ppm/V	
Working Voltage		50 V	
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 at + 25 °C
	Ratio	20 ppm	1 year at + 25 °C

DIMENSIONS AND IMPRINTING in inches and millimeters



DIMENSION	14		16	
	Inches	mm	Inches	mm
H	0.235	5.969	0.235	5.969
E	0.154	3.911	0.154	3.91
O	0.340	8.363	0.390	9.906
A	0.063	1.60	0.063	1.60
e	0.050	1.270	0.050	1.270
B	0.015	0.381	0.015	0.381
C	0.008	0.203	0.008	0.203
L	0.025	0.635	0.025	0.635
A_1	0.006	0.152	0.006	0.152
h	0.015	0.381	0.015	0.381

MECHANICAL SPECIFICATIONS	
Resistive Element	Passivated Nichrome (standard) or Tantalum Nitride (1)
Substrate Material	Silicon
Terminals	Copper
Lead Coplanarity	± 0.004
Body	Molded Epoxy
Marking Resistance to Solvents	Per MIL-PRF-83401
Model NOMC	85 Sn/15 Pb (Plated)
Model NOMCT	100 % Matte Tin (Plated)

Note

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

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. Resistance 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

NOMC

Vishay Thin Film — Molded, 50 Mil Pitch, Dual-In-Line Resistor Network Narrow Body

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: NOMC16031002BUF (preferred part number format)

N	O	M	C	1	6	0	3	1	0	0	2	B	U	F
N	O	M	C	T	1	4	0	3	1	0	0	3	Z	T	1

GLOBAL MODEL (4 or 5 digits)	PINS	SCHEMATIC	RESISTANCE	TOLERANCE AND RATIO TOLERANCE	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 % / 0.05 % **B** = 0.1 % / 0.1 % **C** = 0.25 % / 0.1 % **D** = 0.5 % / 0.1 % **F** = 1 % / 0.5 % ***Z** = 0.1 % / 0.025 % * Tol. available 1K and up	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 2500 **TS** = 100 Min 1 Mult **UF** = TUBED

Historical Part Number example: NOMC16031002Z (will continue to be accepted)

NOMC	16	03	1002	Z
SERIES	PINS	SCHEMATIC	RESISTANCE	TOLERANCE AND RATIO TOLERANCE

Disclaimer

All product specifications and data are subject to change without notice.

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 herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay’s terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

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.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.