NOMC



Vishay Dale Thin Film

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 ⁽¹⁾ resistor films to optimize performance.

Note

SCHEMATICS

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

NOMC1401 or NOMCT1401

NOMC1601 or NOMCT1601

The 01 circuit provides a choice of 13 or 15 equal value

resistors each connected between a common lead (14 or

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 $(\Delta R \pm 0.015 \%)$
- Low TCR tracking ± 5 ppm/°C
- · Isolated and bussed schematics
- Material categorization: for definitions of compliance please see <u>www.vishav.com/doc?99912</u>

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

\bullet	ABSOLUTE	TRACKING
TCR	25	5
	ABSOLUTE	RATIO
TOL.	0.10	0.05



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

STANDARD RESISTANCE OFFERING (Equal Value Resistors)		
SED (01) SCHEMATIC		
1 kΩ		
5 kΩ		
10 kΩ		
20 kΩ		
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Note

· Consult factory for additional values

16). Custom schematics available.

Revision: 25-Apr-17

For technical questions, contact: thinfilm@vishay.com



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Vishay Dale Thin Film

CONDITIONS

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- 55 °C to + 125 °C - 55 °C to + 125 °C + 25 °C + 25 °C Maximum at + 70 °C

Maximum at + 70 °C 2000 h at + 70 °C

2000 h at + 70 °C

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NOMC

Noise		≤ - 3	0 dB			-	
Thermal EMF		0.08 µV/°C		-			
Shelf Life Stability: Absolut	te	$\Delta R \pm 0.01$ %		1 year at + 25 °C			
Shelf Life Stability: Ratio		$\Delta R \pm 0$.002 %		1	year at + 2	5 °C
DIMENSIONS AND I	MPRINTING	in inches and n	nillimeters				
			DIMENSION		14		16
∱ <u>↓ ↓ ↓ </u>			DIVIENSION	INCHES	MILLIMETERS	INCHES	MILLIMETERS
			Н	0.235	5.969	0.235	5.969
			E	0.154	3.911	0.154	3.91
PIN 1 Locator		0	0.340	8.363	0.390	9.906	
			A	0.063	1.60	0.063	1.60
			е	0.050	1.270	0.050	1.270
<u>→ 0</u> →		→ h x 45°	В	0.015	0.381	0.015	0.381
	ſ° (С	0.008	0.203	0.008	0.203
└ <u>╷</u> ┝- <u>╎</u> ┝- <u>│</u> ┝- <u>│</u> ┝- <u>│</u> ┝- -► e - -			L	0.025	0.635	0.025	0.635
	_ → ∢ _ L	Å ₁	A1	0.006	0.152	0.006	0.152
			h	0.015	0.381	0.015	0.381
			•	•	•		
MECHANICAL SPEC	CIFICATIONS						
Bagistiva Element					Dessivated pick	romo	

400 mW/500 mW

 $\Delta R \pm 0.05~\%$

 $\Delta R \pm 0.015$ %

< 0.1 ppm/V

100 V max. not to exceed $\sqrt{P \times R}$

- 55 °C to + 125 °C

- 55 °C to + 150 °C

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
Nata	

Note

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



Power Rating: Package

Operating Temperature Range

Storage Temperature Range

Stability: Absolute

Voltage Coefficient

Working Voltage

Stability: Ratio

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STANDARD ELECTRICAL SPECIFICATIONS	
TEST	SPECIFICATIONS
Material	Passivated nichrome (standard) Tantalum nitride (available upon request)
Pin/Lead Number	14, 16
Resistance Range	100 Ω to 50 k Ω each resistor (bussed (01) schematic)
	100 Ω to 100 k Ω each resistor (isolated (03) schematic)
TCR: Absolute	± 25 ppm/°C (standard)
TCR: Tracking	± 5 ppm/°C (typical)
Tolerance: Absolute	± 0.10 % to ± 1 %
Tolerance: Ratio	± 0.025 % to ± 0.1 %
Power Rating: Resistor	100 mW ((typical) (03) schematic)
	50 mW ((01) schematic)





ORDERING INFORMATION CHECK LIST (Customs) Special requirements should be identified in advance, but as a minimum, you should have the following information ready.				
 Resistors, by value and tolerance Reference resistor(s) and matching of which resistors to which reference resistors Reference by ratio Absolute temperature coefficient of resistivity Temperature tracking of subordinate resistors to reference resistor(s) Maximum operating voltage Resistor power ratings Operating temperature range 	 Maximum allowable seated height (from PC board to top of network) Special marking concerns Schematic pin out of package 			



Notes

⁽¹⁾ Tolerance available 1K and up

⁽²⁾ Preferred packaging code

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