

CHIP RESISTOR ARRAY



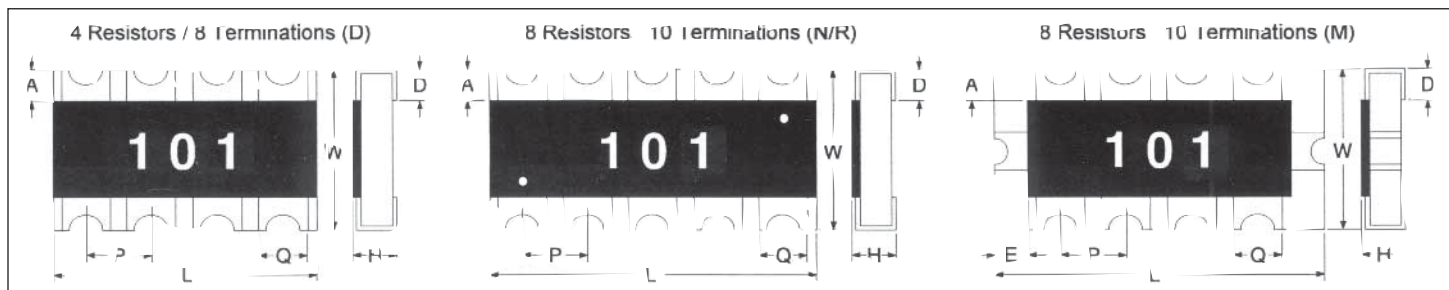
NAC 10, 16, 20, 32, 40, 64

Concave Terminations (square corners)

LEADFREE
RoHS Compliant

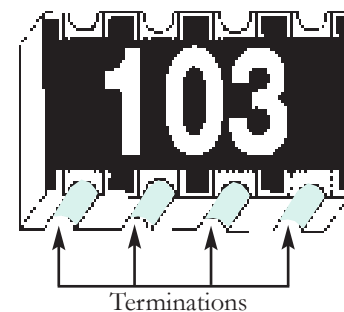
MEGASTAR-OHM NAC series is a chip resistor array enabling high density SMD mounting. The array reduces PC board space requirements by 20% compared to individual chip resistors. Ideal for space critical applications such as disc drives, laptop computers, audio equipment and portable communications.

- Thick film Ruthenium Oxide Element
- Multiple circuit types available.
- Square corner construction.
- Zero ohm jumpers available in all sizes.
- E₂₄ standard values.



PERFORMANCE CHARACTERISTICS (Tested per MIL-STD-202)

Type	Ratings	Rated power @ 70°C w/element	Maximum working voltage-V	Maximum overload voltage-V	TCR max. (ppm/°C)		Resistance range (Ohms)	Zero OHM jumpers available
					Resistance Tolerance			
					±5%	±1%		
NAC10-4D		0.063	50V	100V	±200	±200	10Ω -1M	✓
NAC16-2D		0.063	50V	100V	±300	±100	10Ω -1M	
NAC16-4D		0.063	50V	100V	±200	±100	10Ω -1M	✓
NAC16-8D		0.063	50V	100V	±300		10Ω -1M	
NAC20-2D		0.100	100V	200V	±300	±100	10Ω -1M	
NAC20-4D		0.100	100V	200V	±300	±100	10Ω -1M	✓
NAC20-8D		0.100	100V	200V	±300		10Ω -1M	
NAC32-2D		0.125	200V	400V	±300	±100	10Ω -1M	
NAC32-4D		0.125	75V	150V	±200	*±100	10Ω -1M	✓
NAC32-8D		0.125	200V	400V	±300		10Ω -1M	
NAC40-8M		0.063	25V	50V	±200		56Ω -220K	✓
NAC64-8N/R		0.063	50V	100V	±200		100Ω -470K	✓



*NOTE: For NAC 32-4D 1%
Max. working voltage: 200V
Max. overload voltage: 400V

Part Numbering System

NAC 16 - 4 D - XXX J T

Product Type
Concave

SIZE	WIDTH
10	1.00mm
16	1.60mm
20	2.00mm
32	3.20mm
40	2.10mm
64	3.10mm

Number of Elements	
CODE	ELEMENTS
2	2 resistors
4	4 resistors
8	8 resistors

CIRCUIT TYPE	
CODE	DETAILS
D	Isolated
M	Bussed
N	Common (bussed)
R	Reverse Common (bussed)

Resistance Value (E24)	
CODE	VALUES
000	Jumper
202	2.0 KΩ
393	39.0KΩ

3-digit code
(2 significant digits plus multiplier)

Packaging	
CODE	DETAIL
B	Bulk
T	Tape & Reel (paper carrier)
TE	Tape & Reel (plastic carrier)

Please refer to packaging explanation on page 29.

TOLERANCE	
CODE	%
F	±1%
J	±5%

Omit for jumper

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DIMENSIONS (mm)

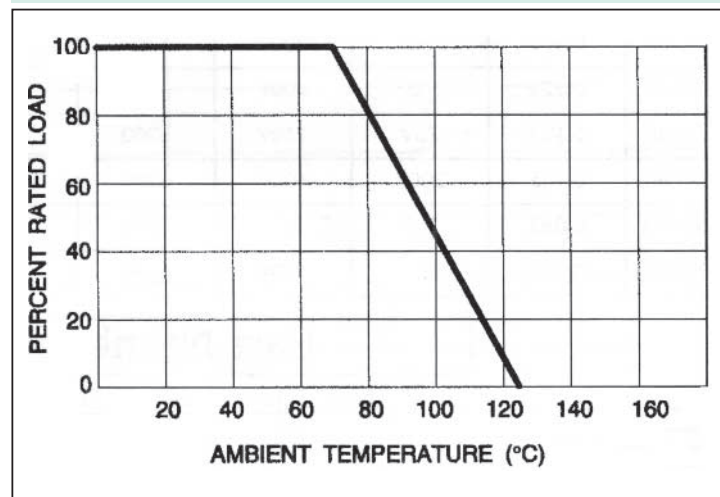
	L	W	H	P*	Q	D	A	E	
Dimensions	Body Length (±.20)	Body Width (±.20)	Body Height (±.10)	Element Spacing* (*reference only)	Termination Width (±.15)	Bottom Termination (±.20)	Top Termination (±.20)	End Termination	Circuit Schematic
NAC10-4D	2.0	1.0	0.45	0.50	0.45	0.30	0.20	—	D
NAC16-2D	1.6	1.6	0.60	0.80	0.50	0.40	0.30	—	D
NAC16-4D	3.20	1.60	0.60	0.80	0.40	0.40	0.30	—	D
NAC16-8D	6.4	1.6	0.60	0.80	0.50	0.40	0.30	—	D
NAC20-2D	2.54	2.0	0.60	1.27	0.80	0.55	0.40	—	D
NAC20-4D	5.08	2.0	0.60	1.27	0.80	0.55	0.40	—	D
NAC20-8D	10.16	2.0	0.60	1.27	0.80	0.55	0.40	—	D
NAC32-2D	2.54	3.2	0.60	1.27	0.80	0.55	0.50	—	D
NAC32-4D	5.08	3.00	0.60	1.27	0.80	0.50	0.55	—	D
NAC32-8D	10.16	3.2	0.60	1.27	0.80	0.55	0.50	—	D
NAC40-8M	4.00	2.10	0.60	0.80	0.50	0.40	0.25	0.30±0.20	M
NAC64-8N/R	6.40	3.10±	0.60	1.27	1.00	0.60	0.60	—	N or R

ENVIRONMENTAL CHARACTERISTICS

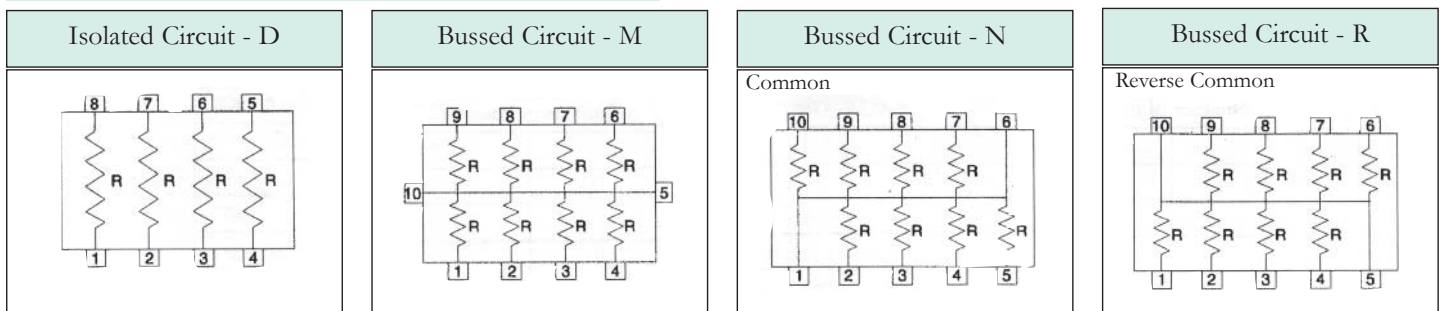
DESCRIPTION	PERFORMANCE
Operating Temperature Range	-55°C to 125°C
Short Time Overload	±2.0% maximum
Terminal Strength	±1.0% maximum
Solder-Heat Resistance	±1.0% maximum
Solderability	95% min. coverage
Temperature Cycle	±1.0% maximum
Load Life in Moisture	±3.0% maximum
Load Life	±3.0% maximum

Test methods per EIA 575 and JIS C5202

DERATING CURVE



CIRCUIT DIAGRAM SCHEMATICS



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PACKAGING SPECIFICATIONS Units: mm

Dimensions Type	A	B	P	C	D	F	W	T1	T2	Tape Carrier
NAC10-4D	1.40±0.10	2.40±0.10	4.00±0.10	4.00±0.10	1.50±1/-0	3.50±0.05	8.00±0.20	———	0.75max	Paper
NAC16-2D	1.90±0.10	1.90±0.10	4.00±0.10	4.00±0.10	1.50±1/-0	3.50±0.05	8.00±0.20	———	0.75max	Paper
NAC16-4D	2.00±0.20	3.60±0.20	4.00±0.10	4.00±0.10	1.50±1/-0	3.50±0.05	8.00±0.20	0.5max	1.0max	Paper
NAC16-8D	2.00±0.10	6.90±0.10	4.00±0.10	4.00±0.10	1.50±1/-0	5.50±0.05	12.00±0.30	0.30±0.05	0.90max	Plastic
NAC20-2D	2.40±0.20	2.95±0.10	4.00±0.10	4.00±0.10	1.50±1/-0	3.50±0.05	8.00±0.20	0.25±0.05	1.0max	Plastic
NAC20-4D	2.45±0.20	5.40±0.10	4.00±0.10	4.00±0.10	1.50±1/-0	5.50±0.05	12.00±0.30	0.25±0.05	1.0max	Plastic
NAC20-8D	2.45±0.20	10.5±0.10	4.00±0.10	4.00±0.10	1.50±1/-0	7.50±0.05	16.00±0.20	0.25±0.05	1.0max	Plastic
NAC32-2D	2.85±0.20	2.95±0.10	8.00±0.10	4.00±0.10	1.50±1/-0	3.50±0.05	8.00±0.20	0.25±0.05	1.0max	Plastic
NAC32-4D	3.50±0.10	5.70±0.10	4.00±0.10	4.00±0.10	1.50±1/-0	5.50±0.05	12.00±0.20	0.25±0.05	1.10max	Plastic
NAC32-8D	3.60±0.20	10.5±0.10	8.00±0.10	4.00±0.10	1.50±1/-0	7.50±0.05	16.00±0.20	0.25±0.05	1.0max	Plastic
NAC40-8M	2.50±0.10	4.40±0.10	4.00±0.10	4.00±0.10	1.50±1/-0	5.50±0.05	12.00±0.20	0.25±0.05	1.10max	Plastic
NAC64-8N/R	3.50±0.10	6.75±0.10	4.00±0.10	4.00±0.10	1.50±1/-0	5.50±0.05	12.00±0.20	0.25±0.05	1.10max	Plastic

Dimensions Type	H	J	K	L	M	S	T	U	Qty/Reel	Package
NAC10-4D	178.0±2.0	80±+1/-0	13.0±0.20	21.0±0.80	2.0±0.50	10.0±2.0	0.60±0.02	11.2±1.0	10000	T
NAC16-2D	178.0±2.0	80±+1/-0	13.0±0.20	21.0±0.80	2.0±0.50	10.0±2.0	0.60±0.02	11.2±1.0	5000	T
NAC16-4D	178.0±2.0	50 APPR	13.0±0.20	21.0±0.80	2.0±0.50	13.5±2.0	0.60±0.02	14.7±1.0	5000	T
NAC16-8D	178.0±2.0	60±+1/-0	13.0±0.20	21.0±0.80	2.0±0.50	14.0±2.0	0.60±0.02	15.2±1.0	4000	TE
NAC20-2D	178.0±2.0	60±+1/-0	13.0±0.20	21.0±0.80	2.0±0.50	10.0±2.0	0.60±0.02	11.2±1.0	4000	TE
NAC20-4D	178.0±2.0	60±+1/-0	13.0±0.20	21.0±0.80	2.0±0.50	14.0±2.0	0.60±0.02	15.2±1.0	4000	TE
NAC20-8D	178.0±2.0	60±+1/-0	13.0±0.20	21.0±0.80	2.0±0.50	16.4±2.0	0.60±0.02	17.6±1.0	4000	TE
NAC32-2D	178.0±2.0	60±+1/-0	13.0±0.20	21.0±0.80	2.0±0.50	10.0±2.0	0.60±0.02	11.2±1.0	4000	TE
NAC32-4D	180±+0/-3	60±+1/-0	13.0±0.20	21.0±0.80	2.0±0.50	9.0±0.30	0.60±0.02	11.4±1.0	4000	TE
NAC32-8D	178.0±2.0	60±+1/-0	13.0±0.20	21.0±0.80	2.0±0.50	16.4±2.0	0.60±0.02	17.6±1.0	2000	TE
NAC40-8M	180±+0/-3	60±+1/-0	13.0±0.20	21.0±0.80	2.0±0.50	9.0±0.30	———	11.4±1.0	4000	TE
NAC64-8N/R	180±+0/-3	60±+1/-0	13.0±0.20	21.0±0.80	2.0±0.50	9.0±0.30	———	11.4±1.0	4000	TE

A-Pocket Width
B-Pocket Length
P-Pocket Spacing
C-Pin Spacing

D-Pin Diameter
F-Pin to Pocket C/L
W-Strip Width
T1 Strip Thickness

T2-Total Thickness
H-Reel Diameter
J-Hub Diameter
K-Hole Diameter

L-Key Diameter
M-Key Width
S-Reel Inside Width
T-Reel Side Thickness

FEATURES

U-Reel Outside Width

