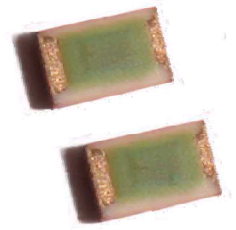


NMCR HAS BEEN REPLACED BY NMCT

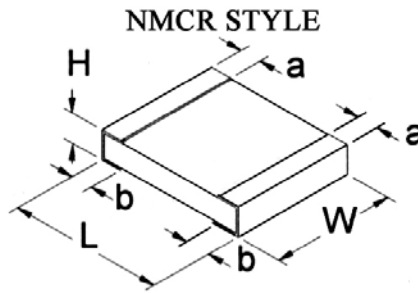
Features:

- NMCR series provides standard wrap-around termination
- Pd-Ag terminations require epoxy adhesive for attachment
- Zero ohm available (max. 0.05Ω)
- RoHS compliant



Electrical Specifications							
Type / Code	Package Size	Power Rating (Watts) @70°C	Maximum Working Voltage ^①	Maximum Overload Voltage	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance	
						1%	5%
NMCR 0402	0402	0.063W	50V	100V	±200	1 - 9.76	
Jumper		1A			±100	10 - 1M	
					±200	1.02M - 10M	
					-	0Ω (<50mΩ)	
NMCR 0603	0603	0.100W	50V	100V	±200	1 - 9.76	
Jumper		1A			±100	10 - 1M	
					±200	1.02M - 10M	
					-	0Ω (<50mΩ)	
NMCR 0805	0805	0.125W	150V	300V	±200	1 - 9.76	
Jumper		1A			±100	10 - 1M	
					±200	1.02M - 10M	
					-	0Ω (<50mΩ)	
NMCR 1206	1206	0.250W	200V	400V	±200	1 - 9.76	
Jumper		2A			±100	10 - 1M	
					±200	1.02M - 10M	
					-	0Ω (<50mΩ)	
NMCR 1210	1210	0.330W	200V	400V	±200	1 - 9.76	
Jumper		2.5A			±100	10 - 1M	
					±200	1.02M - 10M	
					-	0Ω (<50mΩ)	
NMCR 2010	2010	0.750W	200V	400V	±200	1 - 9.76	
Jumper		3.5A			±100	10 - 1M	
					±200	1.02M - 10M	
					-	0Ω (<50mΩ)	
NMCR 2512	2512	1.000W	250V	500V	±200	1 - 9.76	
Jumper		4A			±100	10 - 1M	
					±200	1.02M - 10M	
					-	0Ω (<50mΩ)	

Operating Voltage = $\sqrt{P \cdot R}$ or maximum operating voltage listed above, whichever is lower.
 Overload Voltage = $2.5\sqrt{P \cdot R}$ or maximum overload voltage listed above, whichever is lower.
 ① Lesser of \sqrt{PR} or maximum working voltage.



Mechanical Specifications						
Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Units
NMCR 0402	0.039 ± 0.002 1.00 ± 0.05	0.020 ± 0.002 0.50 ± 0.05	0.014 ± 0.002 0.35 ± 0.05	0.008 ± 0.004 0.20 ± 0.10	0.008 ± 0.004 0.20 ± 0.10	inches mm
NMCR 0603	0.063 ± 0.004 1.60 ± 0.10	0.031 ± 0.004 0.80 ± 0.10	0.018 ± 0.004 0.45 ± 0.10	0.012 ± 0.008 0.30 ± 0.20	0.012 ± 0.008 0.30 ± 0.20	inches mm
NMCR 0805	0.079 ± 0.008 2.00 ± 0.20	0.049 ± 0.004 1.25 ± 0.10	0.020 ± 0.006 0.50 ± 0.15	0.016 ± 0.008 0.40 ± 0.20	0.016 ± 0.008 0.40 ± 0.20	inches mm
NMCR 1206	0.126 ± 0.008 3.20 ± 0.20	0.063 ± 0.006 1.60 ± 0.15	0.021 ± 0.006 0.55 ± 0.15	0.020 ± 0.010 0.50 ± 0.25	0.020 ± 0.008 0.50 ± 0.20	inches mm
NMCR 1210	0.126 ± 0.008 3.20 ± 0.20	0.098 ± 0.008 2.5 ± 0.20	0.021 ± 0.006 0.55 ± 0.15	0.020 ± 0.010 0.50 ± 0.25	0.020 ± 0.008 0.50 ± 0.20	inches mm
NMCR 2010	0.197 ± 0.008 5.00 ± 0.20	0.098 ± 0.008 2.5 ± 0.20	0.021 ± 0.006 0.55 ± 0.15	0.024 ± 0.010 0.60 ± 0.25	0.020 ± 0.008 0.50 ± 0.20	inches mm
NMCR 2512	0.248 ± 0.008 6.30 ± 0.20	0.126 ± 0.008 3.2 ± 0.20	0.021 ± 0.006 0.55 ± 0.15	0.024 ± 0.010 0.60 ± 0.25	0.020 ± 0.008 0.50 ± 0.20	inches mm

Performance Characteristics		
Test	Test Conditions (JIS C 5202)	Test Results
Short Time Overload	2.5x rated voltage for 5 seconds	±(2% + 0.1Ω)
Dielectric Withstanding Voltage	100VAC, 1 minute	±(1% + 0.05Ω)
Resistance to Soldering Heat	260°C ± 5°C, for 10 sec. ± 0.5 sec (Solder Bath)	±(1% + 0.05Ω)
Solderability	235°C ± 5°C, for 2 sec ± 0.5 sec (Colophonium flux)	95% coverage, minimum
Temperature Cycle	-65°C: 30 min. 25°C: 2 to 3 min. 155°C: 30 min. 25°C: 2 to 3 min. (5 cycles)	±(1% + 0.05Ω) Jumper (<0.05Ω)
Endurance (Damp load)	40°C ± 2°C, 90% RH, Rated Load 90 min. ON, 30 min. OFF for 1,000 hrs. -0 hrs. / +48 hrs.	±(3% + 0.1Ω) Jumper (<0.05Ω)
Endurance (Rated load)	70°C ± 2°C, Rated Load 90 min. ON, 30 min. OFF for 1,000 hrs. -0 hrs. / +48 hrs.	±(3% + 0.1Ω) Jumper (<0.05Ω)
Voltage Coefficient	1/10 rated voltage for 3 sec. max, then rated voltage for 3 sec. max.	±100 (ppm/V)
Robustness of Termination	Bend of 3mm for 5 ± 1 sec.	±(1.0% + 0.05Ω)

Operating Temperature Range: -55°C ~ +155°C

How to Order

SEI Type		Size		Nominal Resistance	Tolerance	Packaging				
NMCR		0603		4.7K	5%	R				
Type	Description	Code	Wattage	Tol		Values	Types	Qty	Description	Code
NMCR	Wrap-around Termination	0402	0.063W	1%	E96, E24	0603, 0805, 1206, 1210	0402	10,000	7" reel - paper tape	R
		0603	0.1W							
		0805	0.125W	5%	E24		2010, 2512	4,000	7" - reel - plastic tape	R
		1206	0.25W							
		1210	0.33W	10,000	10" reel - paper tape		0603, 0805, 1206, 1210	10,000	13" reel - paper tape	G
		2010	0.75W							
		2512	1W	10,000						

New part number format starting January 3rd, 2011:

How to Order

1	2	3	4	5	6	7	8	9	10	11	12	13	14
N	M	C	R	0	6	0	3	J	G	4	K	7	0

Product Series		Size	Power	Tolerance		Packaging				Resistance Value
NMCR	Wrap-around Termination	0402	0.063W	Code	Tol	T	7" Reel - Paper Tape	0603, 0805, 1206, 1210	5,000	Four characters with the multiplier used as the decimal holder. 1 ohm = 1R00 9.76 ohm = 9R76 1.02 Mohm = 1M02 10 Mohm = 10M0
		0603	0.1W							
		0805	0.125W	J	5%	G	10" Reel - Paper Tape	0603, 0805, 1206, 1210	10,000	
		1206	0.25W							
		1210	0.33W	J	5%	J	13" Reel - Paper Tape	0603, 0805, 1206, 1210	10,000	
		2010	0.75W							
		2512	1W							