

# NIC PRODUCT PROFILE

## NPM, NPMH Series

Metal Composite High Current; Miniature Chip Sizes

### Description:

An upgrade from standard ferrite based shielded power inductors molded metal composite construction provides high saturation current characteristics, increased frequency performance, and higher efficiency at higher switching frequencies, making these ideal choices for today's efficient DC-DC converters.

The NPMx construction moves from the traditional 'NPIM' construction moving from a lead frame termination to EIA chip style terminations providing reduced footprint and profile size options as small as 0603 (1.6 x 0.8 x 0.8mm).

### NPMx Features & Advantages:

- ◇ High Saturation Current Characteristics
- ◇ 2x efficiency Improvement over ferrite core inductors
- ◇ Stable Performance > 1Mhz
- ◇ 0603 ~ 1210 Chip Sizes with Heights 0.8mm ~ 2.8mm



### Links to Know...

Series Pages:  
[www.niccomp.com/series/NPM](http://www.niccomp.com/series/NPM)  
[www.niccomp.com/series/NPMH](http://www.niccomp.com/series/NPMH)

View all Power Inductors  
[www.niccomp.com/power](http://www.niccomp.com/power)

Search with QuickBUILDER  
[www.NICcomp.com/qb-power](http://www.NICcomp.com/qb-power)

### NPMx Series Applications

- ◇ DC-DC Converters
- ◇ LED Drivers
- ◇ Point of Sale equipment
- ◇ GPS devices
- ◇ Wireless Communications
- ◇ Sensors & Controllers
- ◇ Security & Alarm

### NPMx Series Co-Sell Products

- ◇ Hybrid Aluminum E-Caps (NSPEX)
- ◇ Solid Chip Aluminum E-Caps (NPC, NSP)
- ◇ High CV MLCC's (NMC)
- ◇ Co-Polymer Tantalum Caps (NTP)
- ◇ Current Sensing Resistors (NCS\*)

### NPMx Cross & Replace

- ◇ Murata LQM Series
- ◇ Taiyo Yuden MDMK, MAKK
- ◇ Toko DFE Series
- ◇ Cyntec PSE Series

Series	Type	Height	Inductance Range	DCR Range	I <sub>rms</sub> Max	I <sub>sat</sub> Max
NPM0806	0806 (2.0x1.6 mm)	1.0 mm max.	0.24 ~ 2.2uH	40mΩ ~ 204mΩ	4.0A	4.2A
		1.2 mm max.		30mΩ ~ 195mΩ	4.2A	5.5A
NPM1008	1008 (2.5x2.0 mm)	1.0 mm max.	0.33 ~ 2.2uH	40mΩ ~ 156mΩ	4.5A	7.5A
		1.2 mm max.		31mΩ ~ 120mΩ	4.1A	6.8A
NPM1210	1210 (3.2x2.5 mm)	1.0 mm max.	0.47 ~ 2.2uH	37mΩ ~ 108mΩ	3.6A	5.8A
		1.2 mm max.		27mΩ ~ 85mΩ	5.0A	8.0A
NPMH0603	0806 (1.6x0.8 mm)	0.8mm max.	0.24 ~ 0.47uH	54mΩ ~ 100mΩ	2.6A	3.2A
NPMH0805	0805(2.0x1.2 mm)	0.8mm max.	0.24 ~ 0.47uH	25mΩ ~ 48mΩ	4.2A	4.8A
		1.0 mm max.		28mΩ ~ 176mΩ	3.7A	4.5A
NPMH0806	0806 (2.0x1.6 mm)	0.8mm max.	0.47 ~ 1.5uH	51mΩ ~ 115mΩ	3.1A	3.3A
		1.0 mm max.		27mΩ ~ 135mΩ	3.9A	5.6A
NPMH1008	1008 (2.5x2.0 mm)	1.0 mm max.	0.47 ~ 2.2uH	18mΩ ~ 105mΩ	5.5A	8.0A
		1.2 mm max.		15mΩ ~ 83mΩ	6.2A	9.0A
NPMH1210	1210 (3.2x2.5 mm)	1.0 mm max.	0.24 ~ 2.2uH	16mΩ ~ 85mΩ	6.0A	9.0A
		1.2 mm max.		25mΩ ~ 73mΩ	4.6A	7.0A
		2.8 mm max.		1.0 ~ 2.2uH	34mΩ ~ 60mΩ	3.5A

