



**NIC COMPONENTS CORP.**

<http://www.niccomp.com> / Technical Inquiries: [tpmg@niccomp.com](mailto:tpmg@niccomp.com)

## PRODUCT CHANGE NOTICE

**PRODUCTS:** Power Inductors

**NIC PRODUCT SERIES:** NPI84 Series

THE FOLLOWING IS NOTICE OF AP PART NUMBER AND SPECIFICATION CHANGE FOR THE **NPI84 SERIES** OF SURFACE MOUNT POWER INDUCTORS EFFECTIVE NOVEMBER 1<sup>ST</sup>, 2004.

**PART NUMBERS EFFECTED:** All NPI84 Part Numbers

**REASON FOR CHANGE:** To bring this series into conformance with the part number system of the expanded NPI and NPIS series of power inductors.

THE FOLLOWING IS A LIST OF THE ELECTRICAL AND DIMENSIONAL SPECIFICATION CHANGES THAT ARE PART OF THIS PRODUCT CHANGE NOTICE:

### ELECTRICAL SPECIFICATIONS

NPI84 Part Number	NPI31W Part Number	DC Resistance (Ohms)		DC Current/Isat (Amps)	
		NPI84	NPI31W	NPI84	NPI31W
NPI84M1R0TR	NPI31W1R0MTRF	0.008	0.009	9.0	9.0
NPI84M1R5TR	NPI31W1R5MTRF	0.009	0.010	8.0	8.0
NPI84M2R2TR	NPI31W2R2MTRF	0.010	0.012	7.0	7.0
NPI84M3R3TR	NPI31W3R3MTRF	0.013	0.015	6.4	5.8
NPI84M4R7TR	NPI31W4R7MTRF	0.016	0.018	5.4	5.2
NPI84M6R8TR	NPI31W6R8MTRF	0.019	0.027	4.6	4.3
NPI84M100TR	NPI31W100MTRF	0.025	0.038	3.8	3.4
NPI84M150TR	NPI31W150MTRF	0.040	0.046	3.0	3.0
NPI84M220TR	NPI31W220MTRF	0.050	0.085	2.6	2.5
NPI84M330TR	NPI31W330MTRF	0.088	0.100	2.0	2.0
NPI84M470TR	NPI31W470MTRF	0.120	0.140	1.6	1.8
NPI84M680TR	NPI31W680MTRF	0.160	0.200	1.4	1.4
NPI84M101TR	NPI31W101MTRF	0.230	0.280	1.2	1.1



NIC COMPONENTS CORP.

<http://www.niccomp.com> / Technical Inquiries: [tpmg@niccomp.com](mailto:tpmg@niccomp.com)

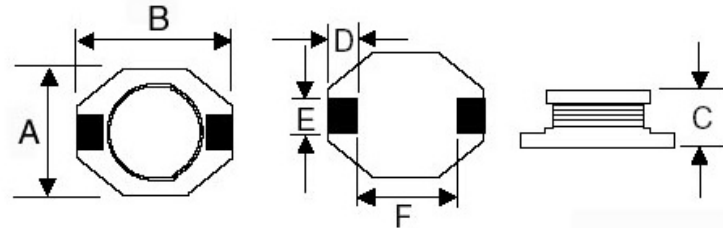
29 October 2004

**PRODUCT CHANGE NOTICE**

NPI84 Part Number	NPI31W Part Number	DC Resistance (Ohms)		DC Current/Isat (Amps)	
		NPI84	NPI31W	NPI84	NPI31W
NPI84M151TR	NPI31W151MTRF	0.330	0.400	1.0	0.9
NPI84M221TR	NPI31W221MTRF	0.530	0.610	0.8	0.8
NPI84M331TR	NPI31W331MTRF	0.810	1.020	0.6	0.6
NPI84M471TR	NPI31W471MTRF	1.100	1.270	0.5	0.5
NPI84M681TR	NPI31W681MTRF	1.600	2.020	0.3	0.4
NPI84M102TR	NPI31W102MTRF	2.150	3.000	0.3	0.3

**DIMENSIONAL SPECIFICATIONS**

Series	A	B	C	D	E	F
NPI84	9.4	12.95	5.08	2.54	2.54	7.64
NPI31W	10.0	12.70	5.00	2.40	2.20	7.60



**PREPARED BY:**

Paul Harris, Technical Sales Manager, NIC Components Corporation

### FEATURES

- CURRENT RATINGS TO 9.0 AMPS
- MINIATURE SIZE FOR A WIDE RANGE OF APPLICATIONS
- SURFACE MOUNTABLE USING REFLOW SOLDERING
- AVAILABLE ON EMBOSSED PLASTIC TAPE & REEL



### SPECIFICATIONS

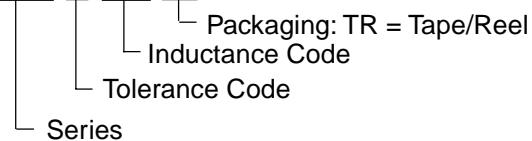
INDUCTANCE RANGE	1.0 $\mu$ H ~ 1000 $\mu$ H
TEMPERATURE RANGE	-40°C ~ +85°C
INDUCTANCE TOLERANCE	$\pm$ 20%

### STANDARD VALUES

Part Number	Inductance 100Khz 0.1Vrms ( $\mu$ H $\pm$ 20%)	DC Resistance (ohms $\pm$ 15%)	Isat (Amps) Inductance drop = 10%	Irms (Amps) $\Delta$ T =15° C rise typ.
NPI84M1R0TR	1.0	0.008	9.0	6.8
NPI84M1R5TR	1.5	0.009	8.0	6.4
NPI84M2R2TR	2.2	0.010	7.0	6.1
NPI84M3R3TR	3.3	0.013	6.4	5.4
NPI84M4R7TR	4.7	0.016	5.4	4.8
NPI84M6R8TR	6.8	0.019	4.6	4.4
NPI84M100TR	10	0.025	3.8	3.9
NPI84M150TR	15	0.040	3.0	3.1
NPI84M220TR	22	0.050	2.6	2.7
NPI84M330TR	33	0.088	2.0	2.1
NPI84M470TR	47	0.12	1.6	1.8
NPI84M680TR	68	0.16	1.4	1.5
NPI84M101TR	100	0.23	1.2	1.3
NPI84M151TR	150	0.33	1.0	1.0
NPI84M221TR	220	0.53	0.8	0.8
NPI84M331TR	330	0.81	0.6	0.6
NPI84M471TR	470	1.10	0.5	0.5
NPI84M681TR	680	1.60	0.3	0.3
NPI84M102TR	1000	2.15	0.3	0.3

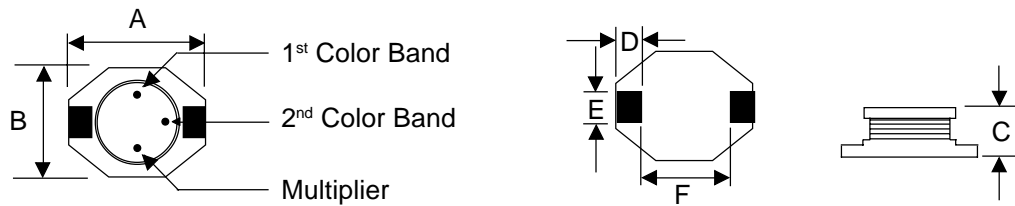
### PART NUMBERING SYSTEM

NPI84 M 1R0 TR



### DIMENSIONS AND PART MARKING SYSTEM

A	B	C	D	E	F
12.95mm	9.4mm	5.08mm	2.54mm	2.54mm	7.64mm



COLOR CODE: 1<sup>st</sup> & 2<sup>nd</sup> significant figures: black-0, brown-1, red-2, orange-3, yellow-4, green-5, blue-6, purple-7, gray-8, white-9  
 3<sup>rd</sup> digit multiplier: black-1, brown-10, red-100, orange-1000, gold-0.1, silver-0.01

### TAPING SPECIFICATIONS

A <sub>0</sub>	B	C	H <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>	W	T	Qty/Reel
9.7mm	13.25mm	11.5mm	5.4mm	12.0mm	2.0mm	24.0mm	0.3mm	700 pcs

