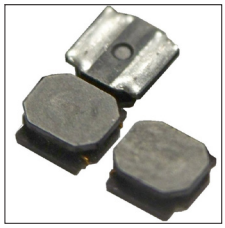
NPIS-L Series
Surface Mount Power Inductors

AEC-Q200 QUALIFIED

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NIC COMPONENTS Performance Passives By Design

FEATURES



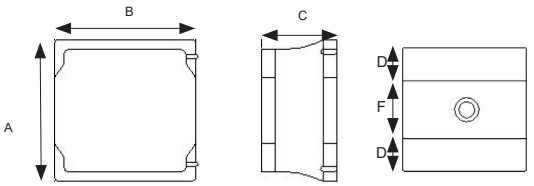
- SHIELDED POWER INDUCTOR
- ULTRA LOW PROFILE (1.0 ~ 4.5mm MAX. HEIGHT)
- SURFACE MOUNTABLE CONSTRUCTION
- INDUCTANCE VALUES UP TO 220µH
- TAPED AND REELED FOR AUTOMATIC INSERTION
- AEC-Q200 QUALIFIED (SEE PART NUMBER DETAILS FOR MORE INFORMATION)

CHARACTERISTICS

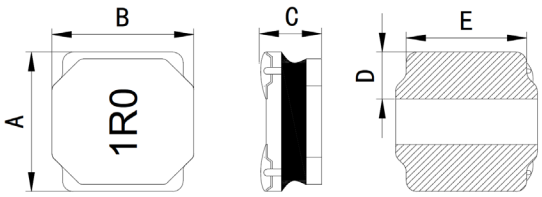
Case Size	NPIS30L	NPIS32L	NPIS35L	NPIS40L	NPIS42L	NPIS48L	NPIS43L
Inductance Range	1.0 ~ 22µH	1.0 ~ 22µH	1.0 ~ 68µH	1.0 ~ 22µH	1.0 ~ 22µH	1.0 ~ 47µH	0.47 ~ 330µH
Case Size	NPIS52L	NPIS54L	NPIS62L	NPIS60L	NPIS63L	NPIS65L	NPIS80L
Inductance Range	1.0 ~ 47µH	0.6 ~ 220µH	2.5 ~100µH	1.5 ~ 10µH	1.0 ~ 100µH	1.0 ~ 100µH	1.0 ~ 100µH
Temperature Range (Including Temp. Rise)	-40°C ~ +125°C (Standard Part Numbers)						
	-55°C ~ +125°C (High reliability. Refer to part number system below)						
Temperatrue Rise at Irms	+40°C max.						
Inductance Change at Isat	- 30% max.						
Inductance Tolerance	±20% (M), ±30% (Y)						
Resistance to Solder Heat	260°C for 10 seconds						

DIMENSIONS (mm) Refer to product tables below for specific shape

Case Size	A	B	C	D	E	F	Image
NPIS30L	3.0 ± 0.2	3.0 ± 0.2	1.0max	1.0 ref	-	1.0 ref	1
NPIS32L	3.0 ± 0.2	3.0 ± 0.2	1.2 max	1.0 ref	-	1.0 ref	1
NPIS35L	3.0 ± 0.2	3.0 ± 0.2	1.5 max	1.0 ref	-	1.0 ref	1
NPIS40L	4.0 ± 0.2	4.0 ± 0.2	1.0 max	1.2 ref	-	1.6 ref	1
NPIS42L	4.0 ± 0.2	4.0 ± 0.2	1.2 max	1.2 ref	-	1.6 ref	1
NPIS48L	4.0 ± 0.2	4.0 ± 0.2	1.8 max	1.2 ref	-	1.6 ref	1
NPIS43L	4.0 ± 0.2	4.0 ± 0.2	2.8 ± 0.2	1.35 ± 0.3	3.4 ± 0.4	-	2
NPIS52L	5.0 ± 0.2	5.0 ± 0.2	1.8 ± 0.2	1.3 ± 0.2	4.7 ± 0.2	-	2
NPIS54L	4.95 ± 0.2	4.95 ± 0.2	3.9 ± 0.2 3.8 ± 0.2	1.3 ± 0.3	4.2 ± 0.2	-	2
NPIS62L	6.0 ± 0.2	6.0 ± 0.2	1.2 max	1.7 ± 0.3	4.8 ± 0.3	-	2
NPIS60L	6.0 ± 0.2	6.0 ± 0.2	1.8 ± 0.2	1.6 ± 0.3	5.8 ± 0.3	-	2
NPIS63L	6.0 ± 0.2	6.0 ± 0.2	2.6 ± 0.2	1.6 ± 0.3	5.8 ± 0.3	-	2
NPIS65L	6.0 ± 0.3	6.0 ± 0.3	4.2 ± 0.3	1.9 ± 0.3	4.8 ± 0.3	-	2
NPIS80L	8.0 ± 0.3	8.0 ± 0.3	4.2 max	2.4 ± 0.3	6.3 ± 0.3	-	2



General Dimension Image 1



General Dimension Image 2

PART NUMBER SYSTEM

NPIS 30 L 150 M TR QY F

- F = RoHS Compliant
- Reliability test meet AEC-Q200, Operating Temperature -55~+125°C (Blank for COTS product)
- Packaging: TR = Tape & Reel
- Inductance Tolerance Code:M=±20%,Y=±30%
- Inductance Code (µH): 1st two digits are significant, 3rd digit is multiplier.
- Construction Code (see drawing for details)
- Size Code (see table for details)
- Series

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Surface Mount Power Inductors

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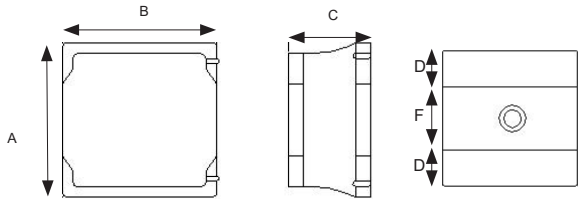
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COMPONENTS
Performance Passives By Design

Part Number	Standard Values - NPIS30L Size (3.0 x 3.0 x 1.0mm)					
	Inductance Value (µH) @ 1MHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS30L1R0YTRF	1	± 30%	0.055	2.20	2.50	-
NPIS30L1R5MTRF	1.5	± 20%	0.070	2.00	2.20	-
NPIS30L2R2MTRF	2.2	± 20%	0.090	1.60	2.10	-
NPIS30L3R3MTRF	3.3	± 20%	0.130	1.30	1.70	-
NPIS30L4R7MTRF	4.7	± 20%	0.170	1.20	1.50	-
NPIS30L6R8MTRF	6.8	± 20%	0.260	0.90	1.30	-
NPIS30L100MTRF	10	± 20%	0.350	0.75	1.00	-
NPIS30L150MTRF	15	± 20%	0.510	0.65	0.80	-
NPIS30L220MTRF	22	± 20%	0.750	0.55	0.75	-

Part Number	Standard Values - NPIS32L Size (3.0 x 3.0 x 1.2mm)					
	Inductance Value (µH) @ 1MHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS32L1R0YTRF	1.0	± 30%	0.042	2.5	2.2	-
NPIS32L1R5YTRF	1.5	± 30%	0.056	2.0	2.0	-
NPIS32L2R2MTRF	2.2	± 20%	0.080	1.8	1.9	-
NPIS32L3R3MTRF	3.3	± 20%	0.100	1.5	1.7	-
NPIS32L4R7MTRF	4.7	± 20%	0.130	1.3	1.5	-
NPIS32L6R8MTRF	6.8	± 20%	0.180	1.2	1.2	-
NPIS32L100MTRF	10	± 20%	0.245	0.9	1.0	-
NPIS32L150MTRF	15	± 20%	0.386	0.8	0.9	-
NPIS32L220MTRF	22	± 20%	0.580	0.6	0.7	-

Part Number	Standard Values - NPIS35L Size (3.0 x 3.0 x 1.5mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS35L1R0YTRF	1.0	± 30%	0.030	2.20	2.20	-
NPIS35L1R5YTRF	1.5	± 30%	0.040	2.00	2.00	-
NPIS35L2R2MTRF	2.2	± 20%	0.060	1.70	1.70	-
NPIS35L3R3MTRF	3.3	± 20%	0.080	1.40	1.40	-
NPIS35L4R7MTRF	4.7	± 20%	0.120	1.20	1.20	-
NPIS35L6R8MTRF	6.8	± 20%	0.160	1.00	1.00	-
NPIS35L100MTRF	10	± 20%	0.220	0.75	0.80	-
NPIS35L150MTRF	15	± 20%	0.320	0.65	0.70	-
NPIS35L220MTRF	22	± 20%	0.460	0.55	0.60	-
NPIS35L330MTRF	33	± 20%	0.800	0.40	0.45	-
NPIS35L470MTRF	47	± 20%	1.20	0.35	0.40	-
NPIS35L680MTRF	68	± 20%	2.00	0.30	0.35	-



NPIS30L, NPIS32L and NPIS35L Construction Shape (Refer to Page 1 for Dimensions)

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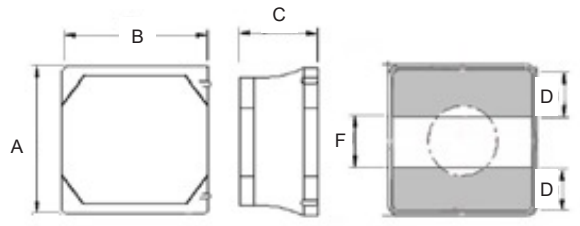
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COMPONENTS
Performance Passives By Design

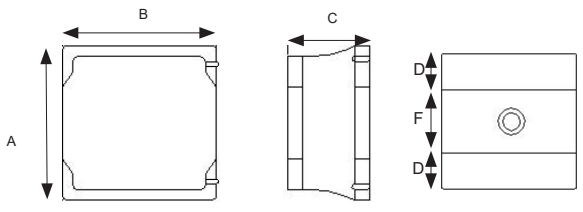
Part Number	Standard Values - NPIS40L Size (4.0 x 4.0 x 1.0mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS40L1R0YTRF	1.0	± 30%	0.056	2.3	2.4	-
NPIS40L2R2MTRF	2.2	± 20%	0.085	1.8	1.5	-
NPIS40L3R3MTRF	3.3	± 20%	0.100	1.7	1.3	-
NPIS40L4R7MTRF	4.7	± 20%	0.140	1.5	1.2	-
NPIS40L6R8MTRF	6.8	± 20%	0.200	1.2	1.0	-
NPIS40L100MTRF	10	± 20%	0.300	0.9	0.8	-
NPIS40L150MTRF	15	± 20%	0.430	0.8	0.7	-
NPIS40L220MTRF	22	± 20%	0.570	0.8	0.6	-

Part Number	Standard Values - NPIS42L Size (4.0 x 4.0 x 1.2mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS42L1R0YTRF	1	± 30%	0.042	3.30	2.50	-
NPIS42L2R2MTRF	2.2	± 20%	0.060	1.95	2.20	-
NPIS42L3R3MTRF	3.3	± 20%	0.070	1.60	1.90	-
NPIS42L4R7MTRF	4.7	± 20%	0.095	1.40	1.70	-
NPIS42L6R8MTRF	6.8	± 20%	0.125	1.10	1.50	-
NPIS42L100MTRF	10	± 20%	0.180	1.00	1.30	-
NPIS42L150MTRF	15	± 20%	0.260	0.80	0.95	-
NPIS42L220MTRF	22	± 20%	0.400	0.60	0.72	

Part Number	Standard Values - NPIS48L Size (4.0 x 4.0 x 1.8mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS48L1R0YTRF	1.0	± 30%	0.027	4.00	3.70	-
NPIS48L1R5YTRF	1.5	± 30%	0.032	3.30	3.30	-
NPIS48L2R2MTRF	2.2	± 20%	0.042	3.00	2.90	-
NPIS48L3R3MTRF	3.3	± 20%	0.055	2.30	2.30	-
NPIS48L4R7MTRF	4.7	± 20%	0.070	2.00	2.00	-
NPIS48L6R8MTRF	6.8	± 20%	0.098	1.70	1.70	-
NPIS48L100MTRF	10	± 20%	0.150	1.50	1.50	-
NPIS48L150MTRF	15	± 20%	0.190	1.10	1.10	-
NPIS48L220MTRF	22	± 20%	0.290	0.90	0.90	-
NPIS48L330MTRF	33	± 20%	0.405	0.75	0.75	-
NPIS48L470MTRF	47	± 20%	0.550	0.60	0.60	-



NPIS40L, NPIS42L Construction Shape (Refer to Page 1 for Dimensions)



NPIS48L Construction Shape (Refer to Page 1 for Dimensions)

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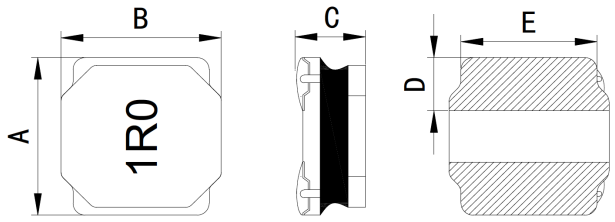
NPIS-L Series
Surface Mount Power Inductors

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COMPONENTS
Performance Passives By Design

Part Number	Standard Values - NPIS43L Size (4.0 x 4.0 x 3.0mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS43LR47MTRF	0.47	± 20%	0.085	7.50	6.00	-
NPIS43LR68MTRF	0.68	± 20%	0.010	6.80	4.60	-
NPIS43L1R0MTRF	1.0	± 20%	0.014	5.30	4.20	-
NPIS43L1R5MTRF	1.5	± 20%	0.020	4.90	3.40	-
NPIS43L2R2MTRF	2.2	± 20%	0.030	4.90	3.00	-
NPIS43L3R3MTRF	3.3	± 20%	0.040	3.30	2.40	-
NPIS43L3R6MTRF	3.6	± 20%	0.047	3.20	2.30	-
NPIS43L3R9MTRF	3.9	± 20%	0.053	3.10	2.20	-
NPIS43L4R7MTRF	4.7	± 20%	0.060	2.90	2.05	-
NPIS43L5R6MTRF	5.6	± 20%	0.065	2.60	1.95	-
NPIS43L6R8MTRF	6.8	± 20%	0.090	2.75	1.80	-
NPIS43L8R2MTRF	8.2	± 20%	0.095	2.10	1.60	-
NPIS43L100MTRF	10	± 20%	0.100	2.00	1.50	-
NPIS43L120MTRF	12	± 20%	0.135	1.80	1.30	-
NPIS43L150MTRF	15	± 20%	0.190	1.70	1.20	-
NPIS43L180MTRF	18	± 20%	0.200	1.50	1.10	-
NPIS43L220MTRF	22	± 20%	0.225	1.30	1.00	-
NPIS43L330MTRF	33	± 20%	0.330	1.10	0.85	-
NPIS43L470MTRF	47	± 20%	0.445	0.95	0.72	-
NPIS43L221MTRF	220	± 20%	2.250	0.45	0.35	-
NPIS43L331MTRF	330	± 20%	3.800	0.40	0.30	-



NPIS43L Construction Shape (Refer to Page 1 for Dimensions)

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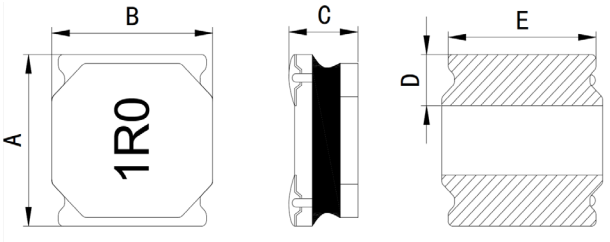
NPIS-L Series
Surface Mount Power Inductors

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COMPONENTS
Performance Passives By Design

Part Number	Standard Values - NPIS52L Size (5.0 x 5.0 x 2.0mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS52L1R0YTRF	1.0	± 30%	0.020	5.0	4.10	NPIS52L1R0YTRQYF
NPIS52L1R2YTRF	1.2	± 30%	0.020	4.8	3.80	NPIS52L1R2YTRQYF
NPIS52L1R5YTRF	1.5	± 30%	0.025	4.5	3.50	NPIS52L1R5YTRQYF
NPIS52L2R2MTRF	2.2	± 20%	0.032	4.1	3.30	NPIS52L2R2MTRQYF
NPIS52L2R7MTRF	2.7	± 20%	0.038	3.8	3.00	NPIS52L2R7MTRQYF
NPIS52L3R3MTRF	3.3	± 20%	0.043	3.5	2.80	NPIS52L3R3MTRQYF
NPIS52L4R7MTRF	4.7	± 20%	0.060	2.7	2.40	NPIS52L4R7MTRQYF
NPIS52L5R6MTRF	5.6	± 20%	0.069	2.4	2.10	NPIS52L5R6MTRQYF
NPIS52L6R8MTRF	6.8	± 20%	0.090	2.1	1.90	NPIS52L6R8MTRQYF
NPIS52L8R2MTRF	8.2	± 20%	0.098	1.9	1.75	NPIS52L8R2MTRQYF
NPIS52L100MTRF	10	± 20%	0.110	1.7	1.60	NPIS52L100MTRQYF
NPIS52L120MTRF	12	± 20%	0.135	1.4	1.40	NPIS52L120MTRQYF
NPIS52L150MTRF	15	± 20%	0.165	1.3	1.25	NPIS52L150MTRQYF
NPIS52L180MTRF	18	± 20%	0.190	1.2	1.17	NPIS52L180MTRQYF
NPIS52L220MTRF	22	± 20%	0.225	1.1	1.10	NPIS52L220MTRQYF
NPIS52L330MTRF	33	± 20%	0.335	0.8	0.80	NPIS52L330MTRQYF
NPIS52L470MTRF	47	± 20%	0.460	0.7	0.70	NPIS52L470MTRQYF



NPIS52L Construction Shape (Refer to Page 1 for Dimensions)

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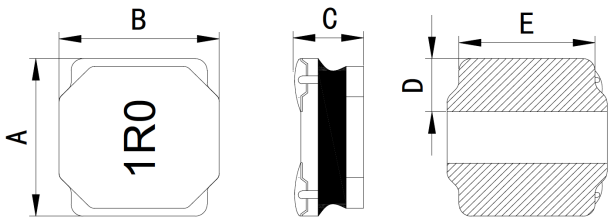
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COMPONENTS
Performance Passives By Design

Part Number	Standard Values - NPIS54L Size (5.0 x 5.0 x 4.0mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS54LR60YTRF	0.6	± 30%	0.008	11.0	8.00	NPIS54LR60YTRQYF
NPIS54L1R0YTRF	1.0	± 30%	0.012	7.50	5.00	NPIS54L1R0YTRQYF
NPIS54L1R5YTRF	1.5	± 30%	0.015	6.50	4.50	NPIS54L1R5YTRQYF
NPIS54L1R8MTRF	1.8	± 20%	0.018	6.10	4.20	NPIS54L1R8MTRQYF
NPIS54L2R2MTRF	2.2	± 20%	0.021	5.70	3.80	NPIS54L2R2MTRQYF
NPIS54L3R3MTRF	3.3	± 20%	0.024	4.40	3.50	NPIS54L3R3MTRQYF
NPIS54L4R7MTRF	4.7	± 20%	0.032	3.90	3.20	NPIS54L4R7MTRQYF
NPIS54L6R8MTRF	6.8	± 20%	0.043	3.30	2.50	NPIS54L6R8MTRQYF
NPIS54L100MTRF	10	± 20%	0.056	2.52	2.20	NPIS54L100MTRQYF
NPIS54L150MTRF	15	± 20%	0.080	2.00	1.80	NPIS54L150MTRQYF
NPIS54L220MTRF	22	± 20%	0.123	1.62	1.50	NPIS54L220MTRQYF
NPIS54L330MTRF	33	± 20%	0.180	1.30	1.20	NPIS54L330MTRQYF
NPIS54L470MTRF	47	± 20%	0.270	1.10	1.00	NPIS54L470MTRQYF
NPIS54L680MTRF	68	± 20%	0.400	0.90	0.8	NPIS54L680MTRQYF
NPIS54L820MTRF	82	± 20%	0.490	0.78	0.75	NPIS54L820MTRQYF
NPIS54L101MTRF	100	± 20%	0.560	0.75	0.72	NPIS54L101MTRQYF
NPIS54L221MTRF	220	± 20%	1.500	0.62	0.55	NPIS54L221MTRQYF

Part Number	Standard Values - NPIS62L Size (6.0 x 6.0 x 1.2mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS62L2R5MTRF	2.5	± 20%	0.085	3.10	3.40	-
NPIS62L5R3MTRF	5.3	± 20%	0.125	2.00	2.60	-
NPIS62L6R8MTRF	6.8	± 20%	0.163	1.75	2.30	-
NPIS62L100MTRF	10	± 20%	0.200	1.40	2.00	-
NPIS62L150MTRF	15	± 20%	0.295	1.25	1.85	-
NPIS62L220MTRF	22	± 20%	0.450	0.95	1.55	-
NPIS62L330MTRF	33	± 20%	0.580	0.77	1.30	-
NPIS62L470MTRF	47	± 20%	0.910	0.68	1.10	-
NPIS62L680MTRF	68	± 20%	1.160	0.51	0.90	-
NPIS62L101MTRF	100	± 20%	1.660	0.39	0.70	-



NPIS54L, NPIS62L Construction Shape (Refer to Page 1 for Dimensions)

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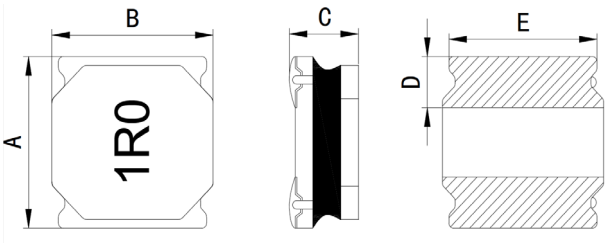
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NIC COMPONENTS Performance Passives By Design

Part Number	Standard Values - NPIS60L Size (6.0 x 6.0 x 2.0mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS60L1R5MTRF	1.5	± 20%	0.0225	5.5	3.8	-
NPIS60L2R2MTRF	2.2	± 20%	0.029	5	3.5	-
NPIS60L3R3MTRF	3.3	± 20%	0.035	4	3.3	-
NPIS60L4R7MTRF	4.7	± 20%	0.054	3	2.8	-
NPIS60L6R8MTRF	6.8	± 20%	0.078	2.6	2.5	-
NPIS60L100MTRF	10	± 20%	0.106	2.1	2.1	-

Part Number	Standard Values - NPIS63L Size (6.0 x 6.0 x 2.8mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS63L1R0YTRF	1.0	± 30%	0.010	5.75	5.2	-
NPIS63L1R5YTRF	1.5	± 30%	0.014	5.3	4.95	-
NPIS63L2R2MTRF	2.2	± 20%	0.018	5	4.5	-
NPIS63L3R3MTRF	3.3	± 20%	0.024	4.3	3.6	-
NPIS63L4R7MTRF	4.7	± 20%	0.030	3.2	3.1	-
NPIS63L6R8MTRF	6.8	± 20%	0.047	2.85	2.5	-
NPIS63L100MTRF	10	± 20%	0.065	2.1	2	-
NPIS63L150MTRF	15	± 20%	0.098	2	1.8	-
NPIS63L220MTRF	22	± 20%	0.138	1.6	1.5	-
NPIS63L330MTRF	33	± 20%	0.200	1.4	1.3	-
NPIS63L470MTRF	47	± 20%	0.280	1.15	1.06	-
NPIS63L680MTRF	68	± 20%	0.420	1	0.81	-
NPIS63L101MTRF	100	± 20%	0.605	0.8	0.72	-



NPIS60L, NPIS63L Construction Shape (Refer to Page 1 for Dimensions)

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NPIS-L Series
Surface Mount Power Inductors

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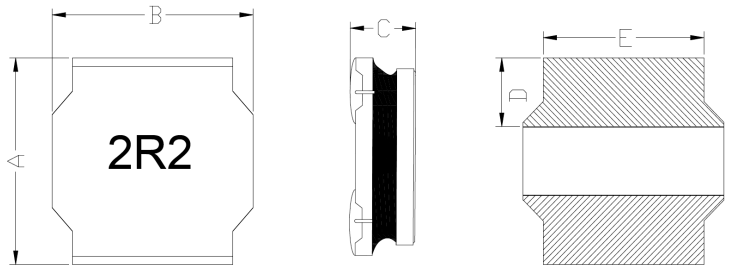
NIC COMPONENTS
Performance Passives By Design

Part Number	Standard Values - NPIS65L Size (6.0 x 6.0 x 4.5mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS65L1R0MTRF	1.0	± 20%	0.010	13.5	8.00	NPIS65L1R0MTRQYF
NPIS65L1R2MTRF	1.2	± 20%	0.0105	12.5	7.50	NPIS65L1R2MTRQYF
NPIS65L1R5MTRF	1.5	± 20%	0.0117	12.0	7.00	NPIS65L1R5MTRQYF
NPIS65L1R8MTRF	1.8	± 20%	0.012	11.0	6.80	NPIS65L1R8MTRQYF
NPIS65L2R0MTRF	2	± 20%	0.0135	10.5	6.50	NPIS65L2R0MTRQYF
NPIS65L2R2MTRF	2.2	± 20%	0.015	9.50	6.00	NPIS65L2R2MTRQYF
NPIS65L2R3MTRF	2.3	± 20%	0.016	9.30	5.80	NPIS65L2R3MTRQYF
NPIS65L3R3MTRF	3.3	± 20%	0.021	7.80	5.00	NPIS65L3R3MTRQYF
NPIS65L3R6MTRF	3.6	± 20%	0.0225	7.40	4.90	NPIS65L3R6MTRQYF
NPIS65L4R7MTRF	4.7	± 20%	0.026	6.80	4.50	NPIS65L4R7MTRQYF
NPIS65L5R6MTRF	5.6	± 20%	0.031	6.40	4.10	NPIS65L5R6MTRQYF
NPIS65L6R3MTRF	6.3	± 20%	0.033	5.90	3.80	NPIS65L6R3MTRQYF
NPIS65L6R8MTRF	6.8	± 20%	0.034	5.70	3.60	NPIS65L6R8MTRQYF
NPIS65L100MTRF	10	± 20%	0.052	4.60	3.20	NPIS65L100MTRQYF
NPIS65L150MTRF	15	± 20%	0.071	3.80	2.80	NPIS65L150MTRQYF
NPIS65L220MTRF	22	± 20%	0.096	3.30	2.30	NPIS65L220MTRQYF
NPIS65L330MTRF	33	± 20%	0.145	2.50	1.80	NPIS65L330MTRQYF
NPIS65L470MTRF	47	± 20%	0.200	2.00	1.60	NPIS65L470MTRQYF
NPIS65L680MTRF	68	± 20%	0.305	1.60	1.10	NPIS65L680MTRQYF
NPIS65L101MTRF	100	± 20%	0.456	1.33	0.92	NPIS65L101MTRQYF

Part Number	Standard Values - NPIS80L Size (8.0 x 8.0 x 4.0mm)					
	Inductance Value (µH) @ 100KHz	Value Tolerance	DC Resistance (Ω) ±20%	DC Current Isat (Amps)	DC Current Irms (Amps)	AEC-Q200 Part Number
NPIS80L1R0MTRF	1.0	± 20%	0.082	13.80	8.5	NPIS80L1R0MTRQYF
NPIS80L1R4MTRF	1.4	± 20%	0.010	11.80	8.2	NPIS80L1R4MTRQYF
NPIS80L1R5MTRF	1.5	± 20%	0.010	11.50	8.0	NPIS80L1R5MTRQYF
NPIS80L1R6MTRF	1.6	± 20%	0.010	11.50	8.0	-
NPIS80L1R8MTRF	1.8	± 20%	0.0105	10.50	7.7	-
NPIS80L2R0MTRF	2	± 20%	0.011	10.20	7.5	-
NPIS80L2R2MTRF	2.2	± 20%	0.0115	9.80	7.4	NPIS80L2R2MTRQYF
NPIS80L2R7MTRF	2.7	± 20%	0.013	9.00	7.0	-
NPIS80L3R3MTRF	3.3	± 20%	0.015	8.00	6.6	NPIS80L3R3MTRQYF
NPIS80L4R7MTRF	4.7	± 20%	0.0195	6.70	5.8	NPIS80L4R7MTRQYF
NPIS80L5R6MTRF	5.6	± 20%	0.022	6.20	5.4	NPIS80L5R6MTRQYF
NPIS80L6R8MTRF	6.8	± 20%	0.025	5.60	5.1	NPIS80L6R8MTRQYF
NPIS80L100MTRF	10	± 20%	0.033	5.00	4.6	NPIS80L100MTRQYF
NPIS80L150MTRF	15	± 20%	0.050	4.00	3.6	NPIS80L150MTRQYF
NPIS80L220MTRF	22	± 20%	0.073	3.10	2.9	NPIS80L220MTRQYF
NPIS80L330MTRF	33	± 20%	0.100	2.60	2.3	NPIS80L330MTRQYF
NPIS80L470MTRF	47	± 20%	0.135	2.20	2.0	NPIS80L470MTRQYF
NPIS80L560MTRF	56	± 20%	0.160	1.90	1.75	NPIS80L560MTRQYF
NPIS80L680MTRF	68	± 20%	0.205	1.75	1.65	NPIS80L680MTRQYF
NPIS80L820MTRF	82	± 20%	0.230	1.60	1.4	NPIS80L820MTRQYF
NPIS80L101MTRF	100	± 20%	0.300	1.45	1.2	NPIS80L101MTRQYF

Maximum +40°C temperature rise at Irms. Maximum -30% inductance change at Isat.

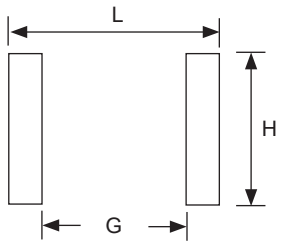
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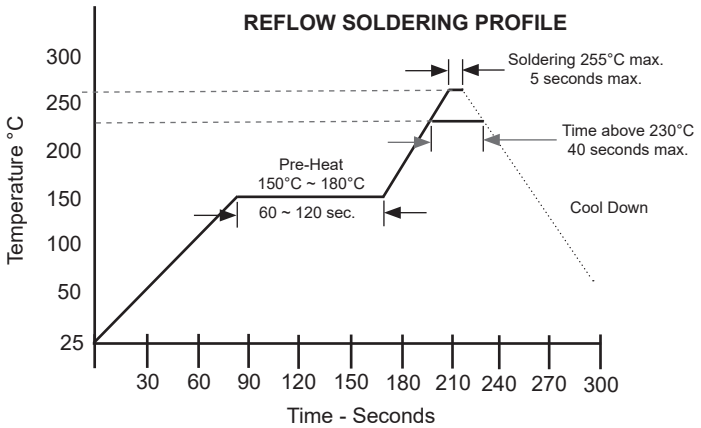


NPIS65L, NPIS80L Construction Shape (Refer to Page 1 for Dimensions)

RECOMMENDED LAND PATTERNS (mm)

Case Size	L	G	H
NPIS30L	3.2	1	3.2
NPIS32L			
NPIS35L			
NPIS40L	4.2	1.2	4.2
NPIS42L			
NPIS48L	4.2	1.4	4.2
NPIS43L	4.5	1.5	4.5
NPIS52L	5.5	1.8	5.5
NPIS54L			
NPIS62L	6.5	2.5	6.5
NPIS60L			
NPIS63L			
NPIS65L	6.5	2.2	6.5
NPIS80L	8.5	2.8	6.6





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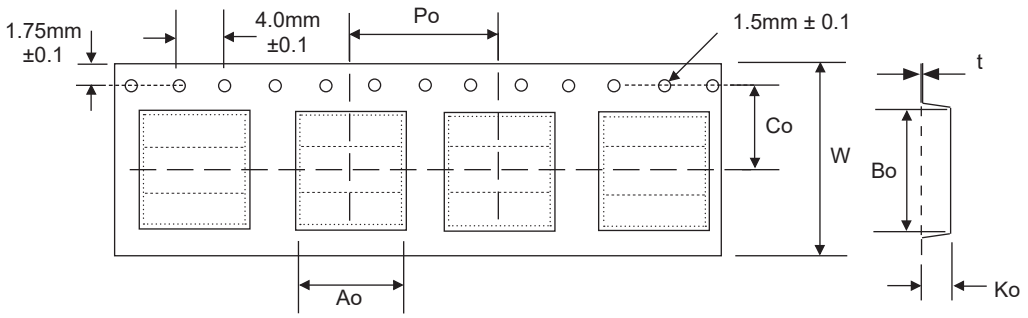
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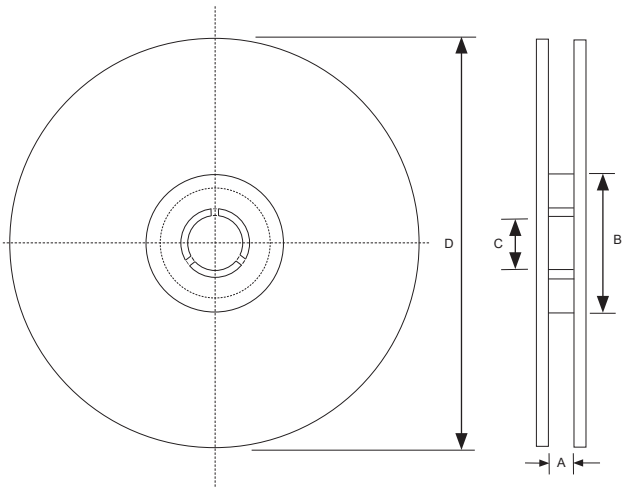
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NIC COMPONENTS
Performance Passives By Design

Case Size	Reel Qty	CARRIER TAPE DIMENSIONS (mm)						
		W	A0	B0	Co	K0	Po	t
NPIS30L	2000	8.0±0.2	3.2±0.05	3.2±0.05	n/a	1.2±0.2	4.0±0.05	0.23±0.05
NPIS32L	2000	8.0±0.2	3.2±0.05	3.2±0.05	n/a	1.4±0.2	4.0±0.05	0.23±0.05
NPIS35L	2000	8.0±0.2	3.2±0.05	3.2±0.05	n/a	1.7±0.2	4.0±0.05	0.23±0.05
NPIS40L	5000	12.0±0.3	4.50±0.1	4.35±0.1	n/a	1.55±0.1	8.0±0.1	0.25±0.05
NPIS42L	4500	12.0±0.3	4.50±0.1	4.35±0.1	n/a	1.55±0.1	8.0±0.1	0.25±0.05
NPIS43L	2000	12.0±0.3	4.25±0.1	4.25±0.1	5.5±0.1	3.2±0.1	8.0±0.1	0.35±0.10
NPIS48L	3500	12.0±0.3	4.50±0.1	4.35±0.1	5.5±0.1	1.92±0.1	8.0±0.1	0.25±0.05
NPIS52L	2500	12.0±0.3	5.40±0.1	5.40±0.1	7.5±0.1	2.2±0.1	8.0±0.1	0.40±0.10
NPIS54L	1500	12.0±0.3	5.40±0.1	5.40±0.1	7.5±0.1	4.3±0.1	8.0±0.1	0.40±0.10
NPIS60L	2000	16.0±0.3	5.40±0.1	5.40±0.1	7.5±0.1	2.2±0.1	12.0±0.1	0.40±0.10
NPIS62L	3000	16.0±0.3	6.40±0.1	6.40±0.1	7.5±0.1	1.4±0.1	12.0±0.1	0.40±0.10
NPIS63L	1500	16.0±0.3	5.40±0.1	5.40±0.1	7.5±0.1	3.0±0.1	12.0±0.1	0.40±0.10
NPIS65L	1000	16.0±0.3	6.40±0.1	6.40±0.1	7.5±0.1	4.7±0.1	12.0±0.1	0.40±0.10
NPIS80L	1000	16.0±0.3	8.40±0.1	8.40±0.1	7.5±0.1	4.3±0.1	12.0±0.1	0.50±0.10



Case Size	Tape Width	REEL DIMENSIONS (mm)			
		A(mm)	B(mm)	C(mm)	D(mm)
NPIS30L	8.0	8.4 ± 1.0	50 min.	13.0 ± 0.8	178 ± 2.0
NPIS32L					
NPIS35L					
NPIS40L	12.0	12.0 ±1.5	100 ± 0.5	13.2 ± 0.5	330 ± 5.0
NPIS42L					
NPIS43L		12.4+2/-0	100 ± 2.0	13+0.5/-0.2	330 ± 3.0
NPIS48L		12.0 ±1.5	100 ± 0.5	13.2 ± 0.5	330 ± 5.0
NPIS52L		12.4+2/-0	80 ± 2.0	13+0.5/-0.2	330 ± 3.0
NPIS54L					
NPIS60L	16.0	16.4+2/-0	80 ± 2.0	13+0.5/-0.2	
NPIS62L					
NPIS63L					
NPIS65L					
NPIS80L	16.0	16.4+2/-0	80 ± 2.0	13+0.5/-0.2	330 ± 3.0



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