

FEATURES

- SHIELDED POWER INDUCTOR
- MOLDED METAL COMPOSITE CONSTRUCTION
- HIGH SATURATION CURRENT CHARACTERISTICS (~ 118A)
- LOW PROFILE (1.0mm ~ 6.7mm)
- MEETS THE REQUIREMENTS OF AEC-Q200

**RoHS
Compliant**
includes all homogeneous materials



*See Part Number System for Details

CHARACTERISTICS

Case Code	39	30	31	32	40	41	42
Inductance Range (μH)	0.47 ~ 10	0.22 ~ 10	0.47 ~ 15	0.10 ~ 10	0.10 ~ 10	0.047 ~ 10	0.10 ~ 22
Ambient Operating Temperature Range	-55°C ~ +125°C						
Maximum Component Temperature (Ambient + Self-Heating)	+125°C						
Temperature Rise at Irms	+40°C						
Inductance Change at Isat	-30%						
Inductance Tolerance	See Specifications Tables						
Resistance to Solder Heat	260°C ±5°C for 10 seconds						

Case Code	59	50	51	52	53	79	70
Inductance Range (μH)	0.10 ~ 15	0.20 ~ 22	0.33 ~ 15	0.33 ~ 10	0.10 ~ 15	0.22 ~ 10	0.22 ~ 22
Ambient Operating Temperature Range	-55°C ~ +125°C						
Maximum Component Temperature (Ambient + Self-Heating)	+125°C						
Temperature Rise at Irms	+40°C						
Inductance Change at Isat	-30%						
Inductance Tolerance	See Specifications Tables						
Resistance to Solder Heat	260°C ±5°C for 10 seconds						

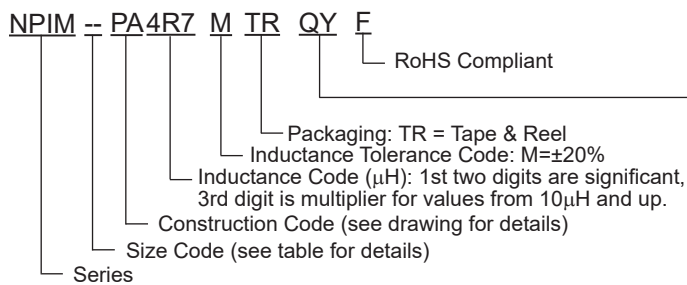
Case Code	71	72	73	74	75	83	104
Inductance Range (μH)	0.22 ~ 10	0.10 ~ 22	0.22 ~ 10	0.10 ~ 47	0.33 ~ 22	0.22 ~ 33	0.15 ~ 47
Ambient Operating Temperature Range	-55°C ~ +125°C						
Maximum Component Temperature (Ambient + Self-Heating)	+125°C						
Temperature Rise at Irms	+40°C						
Inductance Change at Isat	-30%						
Inductance Tolerance	See Specifications Tables						
Resistance to Solder Heat	260°C ±5°C for 10 seconds						

Case Code	105	143	144	145	146	177
Inductance Range (μH)	0.30 ~ 68	0.10 ~ 33	0.22 ~ 22	1.0 ~ 220	0.15 ~ 47	1.0 ~ 100
Ambient Operating Temperature Range	-55°C ~ +125°C					
Maximum Component Temperature (Ambient + Self-Heating)	+125°C					
Temperature Rise at Irms	+40°C					
Inductance Change at Isat	-30%					
Inductance Tolerance	See Specifications Tables					
Resistance to Solder Heat	260°C ±5°C for 10 seconds					

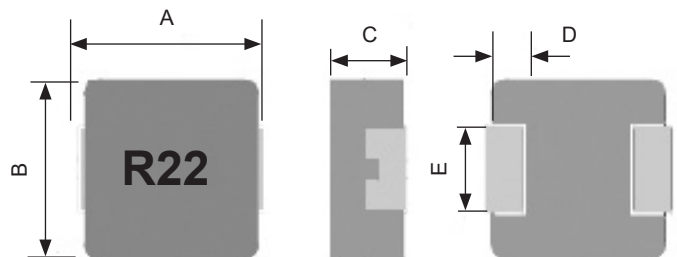


Series	A	B	C	D	E
NPIM39PA	3.50±0.20	3.20±0.20	1.00±0.20	0.70±0.20	1.20±0.20
NPIM30PA	3.50±0.20	3.20±0.20	1.30±0.20	0.70±0.20	1.20±0.20
NPIM31PA	3.50±0.20	3.20±0.20	1.60±0.20	0.70±0.20	1.20±0.20
NPIM32PA	3.50±0.20	3.20±0.20	1.80±0.20	0.70±0.20	1.20±0.20
NPIM40PA	4.45±0.25	4.06±0.25	1.00±0.20	0.76±0.30	2.00±0.20
NPIM41PA	4.45±0.25	4.06±0.25	1.30±0.20	0.76±0.30	2.00±0.20
NPIM42PA	4.45±0.25	4.06±0.25	1.80±0.20	0.76±0.30	2.00±0.20
NPIM59PA	5.70±0.30	5.20±0.20	1.00±0.20	1.10±0.30	2.50±0.30
NPIM50PA	5.70±0.30	5.20±0.20	1.30±0.20	1.10±0.30	2.50±0.30
NPIM51PA	5.70±0.30	5.20±0.20	1.60±0.20	1.10±0.30	2.50±0.30
NPIM52PA	5.70±0.30	5.20±0.20	1.80±0.20	1.10±0.30	2.50±0.30
NPIM53PA	5.70±0.30	5.20±0.20	2.80±0.20	1.10±0.30	2.50±0.30
NPIM79PA	7.30±0.30	6.60±0.30	1.00±0.20	1.80±0.30	3.00±0.30
NPIM70PA	7.30±0.30	6.60±0.30	1.30±0.20	1.80±0.30	3.00±0.30
NPIM71PA	7.30±0.30	6.60±0.30	1.60±0.20	1.80±0.30	3.00±0.30
NPIM72PA	7.30±0.30	6.60±0.30	1.80±0.20	1.80±0.30	3.00±0.30
NPIM73PA	7.30±0.30	6.60±0.30	2.20±0.20	1.80±0.30	3.00±0.30
NPIM74PA	7.30±0.30	6.60±0.30	2.80±0.20	1.80±0.30	3.00±0.30
NPIM75PA	7.30±0.30	6.60±0.30	4.80±0.20	1.80±0.30	3.00±0.30
NPIM83PA	9.50±0.30	8.50±0.30	2.80±0.20	1.40±0.30	4.70±0.30
NPIM104PA	11.00±0.50	10.00±0.30	3.80±0.20	2.30±0.30	3.00±0.30
NPIM105PA	11.00±0.50	10.00±0.30	4.80±0.20	2.30±0.30	3.00±0.30
NPIM143PA	13.50±0.50	12.50±0.30	3.30±0.30	2.30±0.30	4.70±0.30
NPIM144PA	13.50±0.50	12.50±0.30	4.80±0.30	2.30±0.30	4.70±0.30
NPIM145PA	13.50±0.50	12.50±0.30	5.70±0.30	2.30±0.30	4.70±0.30
NPIM146PA	13.50±0.50	12.50±0.30	6.20±0.30	2.30±0.30	4.70±0.30
NPIM177PA	17.60±0.40	16.90±0.30	6.70±0.30	2.10±0.30	11.90±0.30

PART NUMBER SYSTEM



"QY" denotes suitable for automotive equipment, sourced to special production and inspection at IATF-16949 certified production site



Part Number	STANDARD VALUES - CASE SIZE 39PA (3.5 X 3.2 X 1.0mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM39PAR47MTRQYF	0.47	±20%	30	7.2	5.0	100KHz/1.0V
NPIM39PAR56MTRQYF	0.56	±20%	36	6.6	4.5	100KHz/1.0V
NPIM39PAR68MTRQYF	0.68	±20%	40	6.1	4.0	100KHz/1.0V
NPIM39PAR82MTRQYF	0.82	±20%	48	5.8	3.5	100KHz/1.0V
NPIM39PA1R0MTRQYF	1.0	±20%	60	5.5	3.3	100KHz/1.0V
NPIM39PA1R5MTRQYF	1.5	±20%	85	4.0	3.0	100KHz/1.0V
NPIM39PA2R2MTRQYF	2.2	±20%	115	3.4	2.7	100KHz/1.0V
NPIM39PA3R3MTRQYF	3.3	±20%	210	3.1	2.0	100KHz/1.0V
NPIM39PA4R7MTRQYF	4.7	±20%	293	2.8	1.6	100KHz/1.0V
NPIM39PA5R6MTRQYF	5.6	±20%	360	2.2	1.5	100KHz/1.0V
NPIM39PA6R8MTRQYF	6.8	±20%	400	2.0	1.4	100KHz/1.0V
NPIM39PA8R2MTRQYF	8.2	±20%	463	1.7	1.2	100KHz/1.0V
NPIM39PA100MTRQYF	10	±20%	550	1.4	1.0	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 30PA (3.5 X 3.2 X 1.3mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM30PAR22MTRQYF	0.22	±20%	17	10.8	7.0	100KHz/1.0V
NPIM30PAR47MTRQYF	0.47	±20%	28	8.0	5.5	100KHz/1.0V
NPIM30PAR56MTRQYF	0.56	±20%	33	7.2	5.0	100KHz/1.0V
NPIM30PAR68MTRQYF	0.68	±20%	42	6.5	4.5	100KHz/1.0V
NPIM30PA1R0MTRQYF	1.0	±20%	50	5.8	3.6	100KHz/1.0V
NPIM30PA1R5MTRQYF	1.5	±20%	77	4.0	3.4	100KHz/1.0V
NPIM30PA2R2MTRQYF	2.2	±20%	98	3.8	3.2	100KHz/1.0V
NPIM30PA3R3MTRQYF	3.3	±20%	205	3.2	2.5	100KHz/1.0V
NPIM30PA4R7MTRQYF	4.7	±20%	264	2.8	1.9	100KHz/1.0V
NPIM30PA5R6MTRQYF	5.6	±20%	318	2.3	1.7	100KHz/1.0V
NPIM30PA6R8MTRQYF	6.8	±20%	348	2.0	1.5	100KHz/1.0V
NPIM30PA8R2MTRQYF	8.2	±20%	468	1.8	1.3	100KHz/1.0V
NPIM30PA100MTRQYF	10	±20%	522	1.6	1.2	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 31PA (3.5 X 3.2 X 1.6mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM31PAR47MTRQYF	0.47	±20%	25	8.5	6.0	100KHz/1.0V
NPIM31PAR56MTRQYF	0.56	±20%	26	8.0	5.0	100KHz/1.0V
NPIM31PAR68MTRQYF	0.68	±20%	33.5	6.5	5.0	100KHz/1.0V
NPIM31PA1R0MTRQYF	1.0	±20%	44	5.0	3.8	100KHz/1.0V
NPIM31PA1R5MTRQYF	1.5	±20%	65	4.0	3.5	100KHz/1.0V
NPIM31PA2R2MTRQYF	2.2	±20%	85	3.7	3.3	100KHz/1.0V
NPIM31PA3R3MTRQYF	3.3	±20%	158	3.3	2.7	100KHz/1.0V
NPIM31PA4R7MTRQYF	4.7	±20%	208	2.9	2.3	100KHz/1.0V
NPIM31PA5R6MTRQYF	5.6	±20%	275	2.3	1.9	100KHz/1.0V
NPIM31PA6R8MTRQYF	6.8	±20%	320	2.1	1.5	100KHz/1.0V
NPIM31PA8R2MTRQYF	8.2	±20%	405	1.9	1.4	100KHz/1.0V
NPIM31PA100MTRQYF	10	±20%	450	1.6	1.3	100KHz/1.0V
NPIM31PA150MTRQYF	15	±20%	600	1.5	1.2	100KHz/1.0V

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



Part Number	STANDARD VALUES - CASE SIZE 32PA (3.5 X 3.2 X 1.8mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM32PAR10YTRQYF	0.10	±30%	9.0	14.0	10.5	100KHz/1.0V
NPIM32PAR22YTRQYF	0.22	±30%	14.0	11.2	9.0	100KHz/1.0V
NPIM32PAR33MTRQYF	0.33	±20%	21.0	10.0	8.0	100KHz/1.0V
NPIM32PAR47MTRQYF	0.47	±20%	23.0	9.0	7.0	100KHz/1.0V
NPIM32PAR68MTRQYF	0.68	±20%	29.0	7.0	5.5	100KHz/1.0V
NPIM32PA1R0MTRQYF	1.0	±20%	38.0	5.0	4.0	100KHz/1.0V
NPIM32PA1R5MTRQYF	1.5	±20%	50.0	4.0	3.8	100KHz/1.0V
NPIM32PA2R2MTRQYF	2.2	±20%	75.0	3.7	3.5	100KHz/1.0V
NPIM32PA3R3MTRQYF	3.3	±20%	145.0	3.5	3.0	100KHz/1.0V
NPIM32PA4R7MTRQYF	4.7	±20%	200.0	3.0	2.6	100KHz/1.0V
NPIM32PA5R6MTRQYF	5.6	±20%	238.0	2.6	2.2	100KHz/1.0V
NPIM32PA6R8MTRQYF	6.8	±20%	300.0	2.2	1.9	100KHz/1.0V
NPIM32PA8R2MTRQYF	8.2	±20%	390.0	1.9	1.6	100KHz/1.0V
NPIM32PA100MTRQYF	10	±20%	422.0	1.6	1.4	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 40PA (4.45 X 4.06 X 1.0mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM40PAR10YTRQYF	0.10	±30%	5.5	25.0	11.5	100KHz/1.0V
NPIM40PAR47MTRQYF	0.47	±20%	20	6.5	6.0	100KHz/1.0V
NPIM40PAR68MTRQYF	0.68	±20%	37	6.0	5.0	100KHz/1.0V
NPIM40PA1R0MTRQYF	1.0	±20%	47	6.0	4.0	100KHz/1.0V
NPIM40PA2R2MTRQYF	2.2	±20%	80	3.5	2.8	100KHz/1.0V
NPIM40PA3R3MTRQYF	3.3	±20%	97	3.0	2.3	100KHz/1.0V
NPIM40PA4R7MTRQYF	4.7	±20%	145	2.5	2.0	100KHz/1.0V
NPIM40PA5R6MTRQYF	5.6	±20%	208	2.3	1.7	100KHz/1.0V
NPIM40PA6R8MTRQYF	6.8	±20%	360	1.7	1.5	100KHz/1.0V
NPIM40PA100MTRQYF	10	±20%	463	1.4	1.3	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 41PA (4.45 X 4.06 X 1.3mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM41PA47NMTRQYF	0.047	±20%	2.5	48.0	20.5	100KHz/1.0V
NPIM41PAR22MTRQYF	0.22	±20%	7.8	20.0	10.0	100KHz/1.0V
NPIM41PAR47MTRQYF	0.47	±20%	19	11.0	8.0	100KHz/1.0V
NPIM41PAR68MTRQYF	0.68	±20%	21.5	8.5	6.5	100KHz/1.0V
NPIM41PA1R0MTRQYF	1.0	±20%	40	7.0	5.0	100KHz/1.0V
NPIM41PA2R2MTRQYF	2.2	±20%	72	4.0	3.2	100KHz/1.0V
NPIM41PA4R7MTRQYF	4.7	±20%	140	2.8	2.2	100KHz/1.0V
NPIM41PA6R8MTRQYF	6.8	±20%	276	2.3	1.7	100KHz/1.0V
NPIM41PA100MTRQYF	10	±20%	400	1.9	1.5	100KHz/1.0V

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



Part Number	STANDARD VALUES - CASE SIZE 42PA (4.45 X 4.06 X 1.8mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM42PAR10YTRQYF	0.10	±30%	4.0	35.0	12.0	100KHz/1.0V
NPIM42PAR18YTRQYF	0.18	±30%	5.4	28.0	13.5	100KHz/1.0V
NPIM42PAR22YTRQYF	0.22	±30%	7.3	24.0	13.0	100KHz/1.0V
NPIM42PAR33MTRQYF	0.33	±20%	8.6	18.0	10.0	100KHz/1.0V
NPIM42PAR47MTRQYF	0.47	±20%	14.0	12.0	8.0	100KHz/1.0V
NPIM42PAR56MTRQYF	0.56	±20%	16.0	10.0	7.3	100KHz/1.0V
NPIM42PAR68MTRQYF	0.68	±20%	19.0	10.0	7.0	100KHz/1.0V
NPIM42PA1R0MTRQYF	1.0	±20%	27.0	8.5	5.0	100KHz/1.0V
NPIM42PA1R2MTRQYF	1.2	±20%	30.0	7.8	4.8	100KHz/1.0V
NPIM42PA1R5MTRQYF	1.5	±20%	42.0	7.0	4.5	100KHz/1.0V
NPIM42PA2R2MTRQYF	2.2	±20%	61.0	6.0	4.0	100KHz/1.0V
NPIM42PA3R3MTRQYF	3.3	±20%	76.0	4.0	3.5	100KHz/1.0V
NPIM42PA4R7MTRQYF	4.7	±20%	105.0	3.5	2.6	100KHz/1.0V
NPIM42PA5R6MTRQYF	5.6	±20%	125.0	3.0	2.2	100KHz/1.0V
NPIM42PA6R8MTRQYF	6.8	±20%	172.0	2.8	2.1	100KHz/1.0V
NPIM42PA8R2MTRQYF	8.2	±20%	180.0	2.5	2.0	100KHz/1.0V
NPIM42PA100MTRQYF	10	±20%	243.0	2.3	1.8	100KHz/1.0V
NPIM42PA150MTRQYF	15	±20%	374.0	1.9	1.5	100KHz/1.0V
NPIM42PA220MTRQYF	22	±20%	500.0	1.4	1.2	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 59PA (5.70 X 5.20 X 1.0mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM59PAR10YTRQYF	0.1	±30%	5.2	14.5	14.0	100KHz/1.0V
NPIM59PAR15YTRQYF	0.15	±30%	6	14.2	12.0	100KHz/1.0V
NPIM59PAR22YTRQYF	0.22	±30%	6.7	14.0	10.7	100KHz/1.0V
NPIM59PAR22MTRQYF	0.22	±20%	6.7	14.0	10.7	100KHz/1.0V
NPIM59PAR33MTRQYF	0.33	±20%	9.4	13.5	8.5	100KHz/1.0V
NPIM59PAR36MTRQYF	0.36	±20%	11.5	13.0	8.0	100KHz/1.0V
NPIM59PAR47MTRQYF	0.47	±20%	15.8	11.0	7.0	100KHz/1.0V
NPIM59PAR68MTRQYF	0.68	±20%	24.5	9.0	6.0	100KHz/1.0V
NPIM59PA1R0MTRQYF	1.0	±20%	30	6.0	5.0	100KHz/1.0V
NPIM59PA1R2MTRQYF	1.2	±20%	40	5.5	4.5	100KHz/1.0V
NPIM59PA1R5MTRQYF	1.5	±20%	44	5.0	4.0	100KHz/1.0V
NPIM59PA2R2MTRQYF	2.2	±20%	75	4.0	3.5	100KHz/1.0V
NPIM59PA3R3MTRQYF	3.3	±20%	86	3.8	3.0	100KHz/1.0V
NPIM59PA4R7MTRQYF	4.7	±20%	115	3.2	2.5	100KHz/1.0V
NPIM59PA5R6MTRQYF	5.6	±20%	201	3.2	2.4	100KHz/1.0V
NPIM59PA6R8MTRQYF	6.8	±20%	222	3.0	2.0	100KHz/1.0V
NPIM59PA8R2MTRQYF	8.2	±20%	378	2.8	1.7	100KHz/1.0V
NPIM59PA100MTRQYF	10	±20%	385	1.8	1.5	100KHz/1.0V
NPIM59PA150MTRQYF	15	±20%	470	1.6	1.3	100KHz/1.0V

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



Part Number	STANDARD VALUES - CASE SIZE 50PA (5.70 X 5.20 X 1.3mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM50PAR20YTRQYF	0.20	±30%	4.2	22.5	15.0	100KHz/1.0V
NPIM50PAR47MTRQYF	0.47	±20%	13.8	15.0	8.0	100KHz/1.0V
NPIM50PAR68MTRQYF	0.68	±20%	16.2	13.0	7.0	100KHz/1.0V
NPIM50PA1R0MTRQYF	1.0	±20%	25.3	9.0	6.0	100KHz/1.0V
NPIM50PA2R2MTRQYF	2.2	±20%	52	6.0	4.0	100KHz/1.0V
NPIM50PA3R3MTRQYF	3.3	±20%	90	4.5	3.2	100KHz/1.0V
NPIM50PA4R7MTRQYF	4.7	±20%	118	4.0	2.7	100KHz/1.0V
NPIM50PA5R6MTRQYF	5.6	±20%	152	3.2	2.4	100KHz/1.0V
NPIM50PA6R8MTRQYF	6.8	±20%	171	3.0	2.3	100KHz/1.0V
NPIM50PA100MTRQYF	10	±20%	235	2.3	2.0	100KHz/1.0V
NPIM50PA220MTRQYF	22	±20%	466	1.7	1.2	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 51PA (5.70 X 5.20 X 1.6mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM51PAR33MTRQYF	0.33	±20%	8.6	15.0	11.0	100KHz/1.0V
NPIM51PAR47MTRQYF	0.47	±20%	11.3	14.0	10.0	100KHz/1.0V
NPIM51PAR68MTRQYF	0.68	±20%	14.3	13.0	9.0	100KHz/1.0V
NPIM51PA1R0MTRQYF	1.0	±20%	21	10.0	6.8	100KHz/1.0V
NPIM51PA2R2MTRQYF	2.2	±20%	48.3	7.5	4.5	100KHz/1.0V
NPIM51PA3R3MTRQYF	3.3	±20%	69	5.0	3.5	100KHz/1.0V
NPIM51PA4R7MTRQYF	4.7	±20%	98	4.5	3.0	100KHz/1.0V
NPIM51PA5R6MTRQYF	5.6	±20%	127	4.0	2.5	100KHz/1.0V
NPIM51PA6R8MTRQYF	6.8	±20%	137	3.5	2.4	100KHz/1.0V
NPIM51PA100MTRQYF	10	±20%	190	2.8	2.3	100KHz/1.0V
NPIM51PA150MTRQYF	15	±20%	318	2.3	1.7	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 52PA (5.70 X 5.20 X 1.8mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM52PAR33MTRQYF	0.33	±20%	7.3	21.3	12.0	100KHz/1.0V
NPIM52PAR47MTRQYF	0.47	±20%	8.6	18.0	11.5	100KHz/1.0V
NPIM52PAR68MTRQYF	0.68	±20%	12.4	12.8	10.0	100KHz/1.0V
NPIM52PA1R0MTRQYF	1.0	±20%	20.0	13.7	7.0	100KHz/1.0V
NPIM52PA1R2MTRQYF	1.2	±20%	28.0	11.0	6.2	100KHz/1.0V
NPIM52PA1R5MTRQYF	1.5	±20%	30.5	9.8	5.5	100KHz/1.0V
NPIM52PA2R2MTRQYF	2.2	±20%	50.0	9.0	4.2	100KHz/1.0V
NPIM52PA3R3MTRQYF	3.3	±20%	76.0	7.3	3.3	100KHz/1.0V
NPIM52PA4R7MTRQYF	4.7	±20%	116	5.0	2.8	100KHz/1.0V
NPIM52PA5R6MTRQYF	5.6	±20%	122	4.0	2.5	100KHz/1.0V
NPIM52PA6R8MTRQYF	6.8	±20%	150	3.8	2.4	100KHz/1.0V
NPIM52PA8R2MTRQYF	8.2	±20%	171	3.5	2.3	100KHz/1.0V
NPIM52PA100MTRQYF	10	±20%	199	3.4	2.3	100KHz/1.0V

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



Part Number	STANDARD VALUES - CASE SIZE 53PA (5.70 X 5.20 X 2.8mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM53PAR10YTRQYF	0.10	±30%	3	27.0	23.0	100KHz/1.0V
NPIM53PAR22MTRQYF	0.22	±20%	4.4	21.0	15.5	100KHz/1.0V
NPIM53PAR33MTRQYF	0.33	±20%	5.2	19.0	13.7	100KHz/1.0V
NPIM53PAR47MTRQYF	0.47	±20%	7.1	16.0	12.2	100KHz/1.0V
NPIM53PAR68MTRQYF	0.68	±20%	9	13.5	10.2	100KHz/1.0V
NPIM53PAR82MTRQYF	0.82	±20%	11.9	13.0	9.3	100KHz/1.0V
NPIM53PA1R0MTRQYF	1.0	±20%	13.7	12.0	8.8	100KHz/1.0V
NPIM53PA1R2MTRQYF	1.2	±20%	17	11.5	8.0	100KHz/1.0V
NPIM53PA1R5MTRQYF	1.5	±20%	20.7	11.0	7.2	100KHz/1.0V
NPIM53PA2R2MTRQYF	2.2	±20%	29.2	10.0	5.8	100KHz/1.0V
NPIM53PA3R3MTRQYF	3.3	±20%	49.2	8.5	5.0	100KHz/1.0V
NPIM53PA4R7MTRQYF	4.7	±20%	77.5	8.2	3.5	100KHz/1.0V
NPIM53PA5R6MTRQYF	5.6	±20%	102	7.0	3.0	100KHz/1.0V
NPIM53PA6R8MTRQYF	6.8	±20%	112	6.0	2.8	100KHz/1.0V
NPIM53PA8R2MTRQYF	8.2	±20%	114	4.5	2.6	100KHz/1.0V
NPIM53PA100MTRQYF	10	±20%	130	4.0	2.5	100KHz/1.0V
NPIM53PA150MTRQYF	15	±20%	242	2.5	1.9	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 79PA (7.3 X 6.6 X 1.0mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM79PAR22YTRQYF	0.22	±30%	7.5	19.0	11.0	100KHz/1.0V
NPIM79PAR47MTRQYF	0.47	±20%	17	12.0	8.5	100KHz/1.0V
NPIM79PAR68MTRQYF	0.68	±20%	19	9.0	7.0	100KHz/1.0V
NPIM79PA1R0MTRQYF	1	±20%	30	7.0	6.0	100KHz/1.0V
NPIM79PA2R2MTRQYF	2.2	±20%	61	5.0	4.0	100KHz/1.0V
NPIM79PA3R3MTRQYF	3.3	±20%	103	4.0	3.2	100KHz/1.0V
NPIM79PA4R7MTRQYF	4.7	±20%	150	3.8	2.5	100KHz/1.0V
NPIM79PA6R8MTRQYF	6.8	±20%	198	3.0	2.1	100KHz/1.0V
NPIM79PA100MTRQYF	10	±20%	290	2.5	1.8	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 70PA (7.3 X 6.6 X 1.3mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM70PAR22YTRQYF	0.22	±30%	5.2	22.0	14.0	100KHz/1.0V
NPIM70PAR47MTRQYF	0.47	±20%	10.3	16.0	9.5	100KHz/1.0V
NPIM70PAR68MTRQYF	0.68	±20%	15.2	15.0	7.5	100KHz/1.0V
NPIM70PA1R0MTRQYF	1	±20%	25.8	12.0	6.5	100KHz/1.0V
NPIM70PA2R2MTRQYF	2.2	±20%	55	6.5	4.5	100KHz/1.0V
NPIM70PA3R3MTRQYF	3.3	±20%	74	6.0	4.2	100KHz/1.0V
NPIM70PA4R7MTRQYF	4.7	±20%	111	5.0	3.8	100KHz/1.0V
NPIM70PA5R6MTRQYF	5.6	±20%	138	4.5	3.0	100KHz/1.0V
NPIM70PA6R8MTRQYF	6.8	±20%	148	3.5	2.6	100KHz/1.0V
NPIM70PA100MTRQYF	10	±20%	216	2.8	2.3	100KHz/1.0V
NPIM70PA220MTRQYF	22	±20%	504	2.5	1.5	100KHz/1.0V

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



Part Number	STANDARD VALUES - CASE SIZE 71PA (7.3 X 6.6 X 1.6mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM71PAR22MTRQYF	0.22	±20%	3.0	26.0	16.0	100KHz/1.0V
NPIM71PAR47MTRQYF	0.47	±20%	7.4	18.0	12.0	100KHz/1.0V
NPIM71PAR68MTRQYF	0.68	±20%	11	17.0	10.0	100KHz/1.0V
NPIM71PA1R0MTRQYF	1.0	±20%	17	14.0	7.0	100KHz/1.0V
NPIM71PA2R2MTRQYF	2.2	±20%	35	11.0	6.0	100KHz/1.0V
NPIM71PA3R3MTRQYF	3.3	±20%	46	9.0	5.0	100KHz/1.0V
NPIM71PA4R7MTRQYF	4.7	±20%	76	7.0	4.0	100KHz/1.0V
NPIM71PA5R6MTRQYF	5.6	±20%	86	6.0	3.5	100KHz/1.0V
NPIM71PA6R8MTRQYF	6.8	±20%	104	5.5	3.0	100KHz/1.0V
NPIM71PA100MTRQYF	10	±20%	160	3.5	2.3	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 72PA (7.3 X 6.6 X 1.8mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM72PAR10YTRQYF	0.1	±30%	2.4	40.0	21.0	100KHz/1.0V
NPIM72PAR47MTRQYF	0.47	±20%	8.3	20.0	11.7	100KHz/1.0V
NPIM72PAR68MTRQYF	0.68	±20%	10	16.0	10.5	100KHz/1.0V
NPIM72PA1R0MTRQYF	1	±20%	18	14.0	8.0	100KHz/1.0V
NPIM72PA2R2MTRQYF	2.2	±20%	37	10.0	6.0	100KHz/1.0V
NPIM72PA3R3MTRQYF	3.3	±20%	48	8.0	5.0	100KHz/1.0V
NPIM72PA4R7MTRQYF	4.7	±20%	60	7.0	4.5	100KHz/1.0V
NPIM72PA5R6MTRQYF	5.6	±20%	68	6.0	4.0	100KHz/1.0V
NPIM72PA6R8MTRQYF	6.8	±20%	73	5.5	4.0	100KHz/1.0V
NPIM72PA100MTRQYF	10	±20%	154	4.0	2.8	100KHz/1.0V
NPIM72PA220MTRQYF	22	±20%	280	2.5	1.5	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 73PA (7.3 X 6.6 X 2.2mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM73PAR22MTRQYF	0.22	±20%	3.2	34.0	21.0	100KHz/1.0V
NPIM73PAR47MTRQYF	0.47	±20%	5.1	26.0	15.0	100KHz/1.0V
NPIM73PAR68MTRQYF	0.68	±20%	7.2	21.0	13.0	100KHz/1.0V
NPIM73PA1R0MTRQYF	1.0	±20%	13.5	16.0	11.0	100KHz/1.0V
NPIM73PA2R2MTRQYF	2.2	±20%	28	14.0	7.0	100KHz/1.0V
NPIM73PA3R3MTRQYF	3.3	±20%	39	10.0	6.0	100KHz/1.0V
NPIM73PA4R7MTRQYF	4.7	±20%	50	9.0	5.5	100KHz/1.0V
NPIM73PA5R6MTRQYF	5.6	±20%	62	8.0	5.0	100KHz/1.0V
NPIM73PA6R8MTRQYF	6.8	±20%	72	7.0	4.0	100KHz/1.0V
NPIM73PA100MTRQYF	10	±20%	101	5.0	3.2	100KHz/1.0V

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



Part Number	STANDARD VALUES - CASE SIZE 74PA (7.3 X 6.6 X 2.8mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM74PAR10YTRQYF	0.10	±30%	1.7	60.0	32.5	100KHz/1.0V
NPIM74PAR15YTRQYF	0.15	±30%	1.9	45.0	27.0	100KHz/1.0V
NPIM74PAR16YTRQYF	0.16	±30%	1.9	45.0	27.0	100KHz/1.0V
NPIM74PAR20YTRQYF	0.20	±30%	2.5	41.0	24.0	100KHz/1.0V
NPIM74PAR22YTRQYF	0.22	±30%	2.8	40.0	23.0	100KHz/1.0V
NPIM74PAR33MTRQYF	0.33	±20%	3.9	32.0	20.0	100KHz/1.0V
NPIM74PAR36MTRQYF	0.36	±20%	4.2	32.0	19.0	100KHz/1.0V
NPIM74PAR47MTRQYF	0.47	±20%	4.2	26.0	17.5	100KHz/1.0V
NPIM74PAR56MTRQYF	0.56	±20%	5.0	25.5	16.5	100KHz/1.0V
NPIM74PAR60MTRQYF	0.60	±20%	5.2	25.5	16.0	100KHz/1.0V
NPIM74PAR68MTRQYF	0.68	±20%	5.5	25.0	15.5	100KHz/1.0V
NPIM74PAR75MTRQYF	0.75	±20%	6.6	24.5	14.5	100KHz/1.0V
NPIM74PAR82MTRQYF	0.82	±20%	8.0	24.0	13.0	100KHz/1.0V
NPIM74PA1R0MTRQYF	1.0	±20%	10.0	22.0	11.0	100KHz/1.0V
NPIM74PA1R2MTRQYF	1.2	±20%	12.0	20.0	10.0	100KHz/1.0V
NPIM74PA1R5MTRQYF	1.5	±20%	15.0	18.0	9.0	100KHz/1.0V
NPIM74PA1R8MTRQYF	1.8	±20%	17.0	16.0	8.5	100KHz/1.0V
NPIM74PA2R0MTRQYF	2.0	±20%	19.0	15.0	8.2	100KHz/1.0V
NPIM74PA2R2MTRQYF	2.2	±20%	20.0	14.0	8.0	100KHz/1.0V
NPIM74PA2R5MTRQYF	2.5	±20%	22.0	13.0	7.0	100KHz/1.0V
NPIM74PA3R3MTRQYF	3.3	±20%	30.0	13.5	6.0	100KHz/1.0V
NPIM74PA4R7MTRQYF	4.7	±20%	40.0	10.0	5.5	100KHz/1.0V
NPIM74PA5R6MTRQYF	5.6	±20%	48.0	9.0	5.0	100KHz/1.0V
NPIM74PA6R8MTRQYF	6.8	±20%	60.0	8.0	4.5	100KHz/1.0V
NPIM74PA8R2MTRQYF	8.2	±20%	68.0	7.5	4.0	100KHz/1.0V
NPIM74PA100MTRQYF	10	±20%	85.0	6.0	3.5	100KHz/1.0V
NPIM74PA150MTRQYF	15	±20%	123.0	4.0	3.0	100KHz/1.0V
NPIM74PA220MTRQYF	22	±20%	190.0	3.5	2.0	100KHz/1.0V
NPIM74PA330MTRQYF	33	±20%	240.0	2.5	2.0	100KHz/1.0V
NPIM74PA470MTRQYF	47	±20%	363.0	2.0	1.75	100KHz/1.0V

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

Part Number	STANDARD VALUES - CASE SIZE 75PA (7.3 X 6.6 X 4.8mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM75PAR33MTRQYF	0.33	±20%	3.0	32.0	25.0	100KHz/1.0V
NPIM75PAR47MTRQYF	0.47	±20%	3.9	30.0	22.0	100KHz/1.0V
NPIM75PAR68MTRQYF	0.68	±20%	4.5	24.0	18.0	100KHz/1.0V
NPIM75PA1R0MTRQYF	1.0	±20%	6.5	20.0	15.0	100KHz/1.0V
NPIM75PA2R2MTRQYF	2.2	±20%	12	14.0	10.0	100KHz/1.0V
NPIM75PA3R3MTRQYF	3.3	±20%	20.9	12.0	8.0	100KHz/1.0V
NPIM75PA4R7MTRQYF	4.7	±20%	30.8	10.0	6.5	100KHz/1.0V
NPIM75PA5R6MTRQYF	5.6	±20%	49	9.0	5.0	100KHz/1.0V
NPIM75PA6R8MTRQYF	6.8	±20%	51.5	8.5	5.5	100KHz/1.0V
NPIM75PA100MTRQYF	10	±20%	69	7.5	4.0	100KHz/1.0V
NPIM75PA220MTRQYF	22	±20%	170	5.5	2.5	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 83PA (9.5 X 8.5 X 2.8mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM83PAR22MTRQYF	0.22	±20%	1.61	45	30	100KHz/1.0V
NPIM83PAR33MTRQYF	0.33	±20%	2.6	37	25	100KHz/1.0V
NPIM83PAR47MTRQYF	0.47	±20%	3.4	35	21.5	100KHz/1.0V
NPIM83PA1R0MTRQYF	1.0	±20%	8.1	29	14	100KHz/1.0V
NPIM83PA1R5MTRQYF	1.5	±20%	11.8	24	11.5	100KHz/1.0V
NPIM83PA2R2MTRQYF	2.2	±20%	20.5	21	9.0	100KHz/1.0V
NPIM83PA3R3MTRQYF	3.3	±20%	27	14	8.0	100KHz/1.0V
NPIM83PA4R7MTRQYF	4.7	±20%	37	11	7.0	100KHz/1.0V
NPIM83PA6R8MTRQYF	6.8	±20%	53	9.0	5.5	100KHz/1.0V
NPIM83PA8R2MTRQYF	8.2	±20%	60	8.5	5.0	100KHz/1.0V
NPIM83PA100MTRQYF	10	±20%	75	8.2	4.7	100KHz/1.0V
NPIM83PA150MTRQYF	15	±20%	102	7.0	3.8	100KHz/1.0V
NPIM83PA220MTRQYF	22	±20%	180	4.5	3.0	100KHz/1.0V
NPIM83PA330MTRQYF	33	±20%	220	4.0	2.8	100KHz/1.0V

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

Part Number	STANDARD VALUES - CASE SIZE 104PA (11.0 X 10.0 X 3.8mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM104PAR15MTRQYF	0.15	±20%	0.6	75.0	43.0	100KHz/1.0V
NPIM104PAR22MTRQYF	0.22	±20%	1.0	60.0	35.0	100KHz/1.0V
NPIM104PAR27MTRQYF	0.27	±20%	1.0	60.0	33.0	100KHz/1.0V
NPIM104PAR30MTRQYF	0.30	±20%	1.1	60.0	32.0	100KHz/1.0V
NPIM104PAR36MTRQYF	0.36	±20%	1.2	60.0	31.0	100KHz/1.0V
NPIM104PAR39MTRQYF	0.39	±20%	1.3	60.0	30.0	100KHz/1.0V
NPIM104PAR45MTRQYF	0.45	±20%	1.5	45.0	29.0	100KHz/1.0V
NPIM104PAR47MTRQYF	0.47	±20%	1.5	43.0	28.0	100KHz/1.0V
NPIM104PAR56MTRQYF	0.56	±20%	1.8	40.0	25.0	100KHz/1.0V
NPIM104PAR68MTRQYF	0.68	±20%	2.7	39.0	22.0	100KHz/1.0V
NPIM104PA1R0MTRQYF	1.0	±20%	3.3	36.0	18.0	100KHz/1.0V
NPIM104PA1R5MTRQYF	1.5	±20%	4.6	33.0	16.0	100KHz/1.0V
NPIM104PA2R2MTRQYF	2.2	±20%	7.0	27.0	12.0	100KHz/1.0V
NPIM104PA2R5MTRQYF	2.5	±20%	8.7	23.0	11.5	100KHz/1.0V
NPIM104PA3R3MTRQYF	3.3	±20%	11.8	20.0	11.0	100KHz/1.0V
NPIM104PA4R0MTRQYF	4.0	±20%	15.0	18.0	10.2	100KHz/1.0V
NPIM104PA4R7MTRQYF	4.7	±20%	15.5	17.0	10.0	100KHz/1.0V
NPIM104PA5R6MTRQYF	5.6	±20%	19.3	14.0	9.0	100KHz/1.0V
NPIM104PA6R8MTRQYF	6.8	±20%	23.3	13.5	8.5	100KHz/1.0V
NPIM104PA8R2MTRQYF	8.2	±20%	22.5	12.5	8.0	100KHz/1.0V
NPIM104PA100MTRQYF	10	±20%	30.0	12.0	7.5	100KHz/1.0V
NPIM104PA150MTRQYF	15	±20%	45.0	10.0	6.25	100KHz/1.0V
NPIM104PA220MTRQYF	22	±20%	74.0	7.0	5.0	100KHz/1.0V
NPIM104PA270MTRQYF	27	±20%	100.0	6.0	4.0	100KHz/1.0V
NPIM104PA330MTRQYF	33	±20%	112.0	5.0	3.5	100KHz/1.0V
NPIM104PA470MTRQYF	47	±20%	167.0	4.5	3.0	100KHz/1.0V

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

Part Number	STANDARD VALUES - CASE SIZE 105PA (11.0 X 10.0 X 4.8mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM105PAR30MTRQYF	0.3	±20%	0.61	65.0	38.0	100KHz/1.0V
NPIM105PAR90MTRQYF	0.9	±20%	3.0	32.0	25.0	100KHz/1.0V
NPIM105PA1R0MTRQYF	1.0	±20%	3.5	30.0	22.0	100KHz/1.0V
NPIM105PA2R2MTRQYF	2.2	±20%	6.0	24.0	16.0	100KHz/1.0V
NPIM105PA3R3MTRQYF	3.3	±20%	10.4	22.0	14.0	100KHz/1.0V
NPIM105PA5R6MTRQYF	5.6	±20%	16.8	16.0	10.0	100KHz/1.0V
NPIM105PA100MTRQYF	10	±20%	29	13.5	8.0	100KHz/1.0V
NPIM105PA330MTRQYF	33	±20%	92	7.5	4.3	100KHz/1.0V
NPIM105PA470MTRQYF	47	±20%	145	6.5	3.8	100KHz/1.0V
NPIM105PA680MTRQYF	68	±20%	205	4.0	2.5	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 143PA (13.5 X 12.5 X 3.3mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM143PAR10YTRQYF	0.10	±30%	0.43	84.0	43.0	100KHz/1.0V
NPIM143PAR47MTRQYF	0.47	±20%	1.8	55.0	32.0	100KHz/1.0V
NPIM143PA1R0MTRQYF	1.0	±20%	3.5	40.0	24.0	100KHz/1.0V
NPIM143PA2R2MTRQYF	2.2	±20%	8.0	29.0	16.0	100KHz/1.0V
NPIM143PA3R3MTRQYF	3.3	±20%	13.5	27.0	12.0	100KHz/1.0V
NPIM143PA4R7MTRQYF	4.7	±20%	18.5	24.0	10.0	100KHz/1.0V
NPIM143PA5R6MTRQYF	5.6	±20%	22	19.0	9.5	100KHz/1.0V
NPIM143PA6R8MTRQYF	6.8	±20%	24	18.0	9.0	100KHz/1.0V
NPIM143PA8R2MTRQYF	8.2	±20%	28	16.0	8.5	100KHz/1.0V
NPIM143PA100MTRQYF	10	±20%	34	14.0	7.0	100KHz/1.0V
NPIM143PA330MTRQYF	33	±20%	160	6.0	3.5	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 144PA (13.5 X 12.5 X 4.8mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM144PAR22MTRQYF	0.22	±20%	0.55	110.0	52.0	100KHz/1.0V
NPIM144PAR47MTRQYF	0.47	±20%	1.1	65.0	38.0	100KHz/1.0V
NPIM144PAR68MTRQYF	0.68	±20%	1.7	54.0	34.0	100KHz/1.0V
NPIM144PA1R0MTRQYF	1.0	±20%	2.5	50.0	29.0	100KHz/1.0V
NPIM144PA2R2MTRQYF	2.2	±20%	5.5	32.0	20.0	100KHz/1.0V
NPIM144PA3R3MTRQYF	3.3	±20%	9.2	32.0	15.0	100KHz/1.0V
NPIM144PA4R7MTRQYF	4.7	±20%	15	27.0	12.0	100KHz/1.0V
NPIM144PA6R8MTRQYF	6.8	±20%	18.5	21.0	11.0	100KHz/1.0V
NPIM144PA8R2MTRQYF	8.2	±20%	22.5	18.0	9.5	100KHz/1.0V
NPIM144PA100MTRQYF	10	±20%	25.5	16.0	9.0	100KHz/1.0V
NPIM144PA220MTRQYF	22	±20%	58	10.0	6.5	100KHz/1.0V

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



Part Number	STANDARD VALUES - CASE SIZE 145PA (13.5 X 12.5 X 5.7mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM145PA1R0MTRQYF	1.0	±20%	2.4	45.0	29.0	100KHz/1.0V
NPIM145PA1R2MTRQYF	1.2	±20%	2.8	44.0	28.0	100KHz/1.0V
NPIM145PA1R5MTRQYF	1.5	±20%	3.2	43.0	26.0	100KHz/1.0V
NPIM145PA2R2MTRQYF	2.2	±20%	4.7	34.0	21.0	100KHz/1.0V
NPIM145PA3R3MTRQYF	3.3	±20%	7.1	28.0	17.0	100KHz/1.0V
NPIM145PA4R7MTRQYF	4.7	±20%	11.5	25.0	16.0	100KHz/1.0V
NPIM145PA5R6MTRQYF	5.6	±20%	12.6	22.0	15.5	100KHz/1.0V
NPIM145PA6R8MTRQYF	6.8	±20%	13.8	19.0	15.0	100KHz/1.0V
NPIM145PA8R2MTRQYF	8.2	±20%	16.0	17.0	11.0	100KHz/1.0V
NPIM145PA100MTRQYF	10	±20%	20.7	15.5	11.0	100KHz/1.0V
NPIM145PA120MTRQYF	12	±20%	23.0	13.5	9.5	100KHz/1.0V
NPIM145PA150MTRQYF	15	±20%	29.0	13.0	9.0	100KHz/1.0V
NPIM145PA180MTRQYF	18	±20%	35.0	12.0	8.5	100KHz/1.0V
NPIM145PA220MTRQYF	22	±20%	39.5	11.0	8.0	100KHz/1.0V
NPIM145PA270MTRQYF	27	±20%	56.0	9.0	7.0	100KHz/1.0V
NPIM145PA330MTRQYF	33	±20%	75.0	8.0	6.0	100KHz/1.0V
NPIM145PA470MTRQYF	47	±20%	90.0	7.0	5.5	100KHz/1.0V
NPIM145PA560MTRQYF	56	±20%	118.0	6.5	5.3	100KHz/1.0V
NPIM145PA680MTRQYF	68	±20%	140.0	6.0	5.0	100KHz/1.0V
NPIM145PA820MTRQYF	82	±20%	161.0	5.5	4.5	100KHz/1.0V
NPIM145PA101MTRQYF	100	±20%	200.0	5.0	4.0	100KHz/1.0V
NPIM145PA121MTRQYF	120	±20%	235.0	4.5	3.5	100KHz/1.0V
NPIM145PA151MTRQYF	150	±20%	350.0	4.0	3.0	100KHz/1.0V
NPIM145PA221MTRQYF	220	±20%	550.0	3.0	2.0	100KHz/1.0V

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

Part Number	STANDARD VALUES - CASE SIZE 146PA (13.5 X 12.5 X 6.2mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM146PAR15MTRQYF	0.15	±20%	0.60	118.0	55.0	100KHz/1.0V
NPIM146PAR22MTRQYF	0.22	±20%	0.60	112.0	53.0	100KHz/1.0V
NPIM146PAR30MTRQYF	0.30	±20%	0.72	72.0	48.0	100KHz/1.0V
NPIM146PAR33MTRQYF	0.33	±20%	0.80	68.0	46.0	100KHz/1.0V
NPIM146PAR36MTRQYF	0.36	±20%	0.90	66.0	45.0	100KHz/1.0V
NPIM146PAR40MTRQYF	0.40	±20%	1.00	64.0	44.0	100KHz/1.0V
NPIM146PAR47MTRQYF	0.47	±20%	1.20	63.0	41.0	100KHz/1.0V
NPIM146PAR50MTRQYF	0.50	±20%	1.25	60.0	40.0	100KHz/1.0V
NPIM146PAR56MTRQYF	0.56	±20%	1.20	58.0	37.0	100KHz/1.0V
NPIM146PAR68MTRQYF	0.68	±20%	1.50	55.0	35.0	100KHz/1.0V
NPIM146PAR82MTRQYF	0.82	±20%	1.90	50.0	33.0	100KHz/1.0V
NPIM146PA1R0MTRQYF	1.0	±20%	2.30	48.0	30.0	100KHz/1.0V
NPIM146PA1R5MTRQYF	1.5	±20%	3.00	45.0	27.0	100KHz/1.0V
NPIM146PA1R8MTRQYF	1.8	±20%	4.00	40.0	24.0	100KHz/1.0V
NPIM146PA2R2MTRQYF	2.2	±20%	4.20	37.0	22.0	100KHz/1.0V
NPIM146PA3R3MTRQYF	3.3	±20%	6.80	30.0	18.0	100KHz/1.0V
NPIM146PA4R7MTRQYF	4.7	±20%	8.40	28.0	13.5	100KHz/1.0V
NPIM146PA5R6MTRQYF	5.6	±20%	10.0	23.0	12.5	100KHz/1.0V
NPIM146PA6R8MTRQYF	6.8	±20%	11.5	18.0	11.5	100KHz/1.0V
NPIM146PA8R2MTRQYF	8.2	±20%	15.5	16.0	10.5	100KHz/1.0V
NPIM146PA100MTRQYF	10	±20%	16.5	15.5	10.0	100KHz/1.0V
NPIM146PA130MTRQYF	13	±20%	24.0	13.0	9.0	100KHz/1.0V
NPIM146PA150MTRQYF	15	±20%	28.0	12.5	9.0	100KHz/1.0V
NPIM146PA220MTRQYF	22	±20%	37.0	12.0	9.0	100KHz/1.0V
NPIM146PA330MTRQYF	33	±20%	58.0	11.0	8.0	100KHz/1.0V
NPIM146PA470MTRQYF	47	±20%	90.0	9.5	6.5	100KHz/1.0V

Part Number	STANDARD VALUES - CASE SIZE 177PA (17.6 X 16.9 X 6.7mm)					
	Inductance Value (μH)	Tolerance	DC Resistance (mΩ) Max.	DC Current Isat (Amps)	DC Current Irms (Amps)	Test Frequency
NPIM177PA1R0MTRQYF	1.0	±20%	2.0	70.0	52.0	100KHz/1.0V
NPIM177PA2R2MTRQYF	2.2	±20%	2.7	62.0	43.5	100KHz/1.0V
NPIM177PA3R3MTRQYF	3.3	±20%	3.9	54.0	28.0	100KHz/1.0V
NPIM177PA4R7MTRQYF	4.7	±20%	5.5	50.0	25.0	100KHz/1.0V
NPIM177PA5R6MTRQYF	5.6	±20%	7.05	45.0	21.0	100KHz/1.0V
NPIM177PA6R8MTRQYF	6.8	±20%	9.2	39.0	19.0	100KHz/1.0V
NPIM177PA100MTRQYF	10	±20%	13	29.0	16.5	100KHz/1.0V
NPIM177PA220MTRQYF	22	±20%	26.5	23.0	12.0	100KHz/1.0V
NPIM177PA330MTRQYF	33	±20%	44	20.0	10.7	100KHz/1.0V
NPIM177PA470MTRQYF	47	±20%	55	16.0	8.7	100KHz/1.0V
NPIM177PA680MTRQYF	68	±20%	80	13.0	7.0	100KHz/1.0V
NPIM177PA101MTRQYF	100	±20%	118	12.0	5.3	100KHz/1.0V

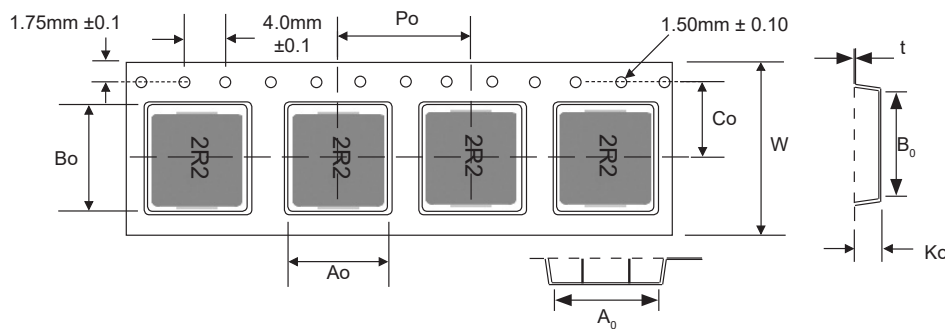
Maximum +40°C temperature rise at Irms. Approximate -30% inductance change at Isat.



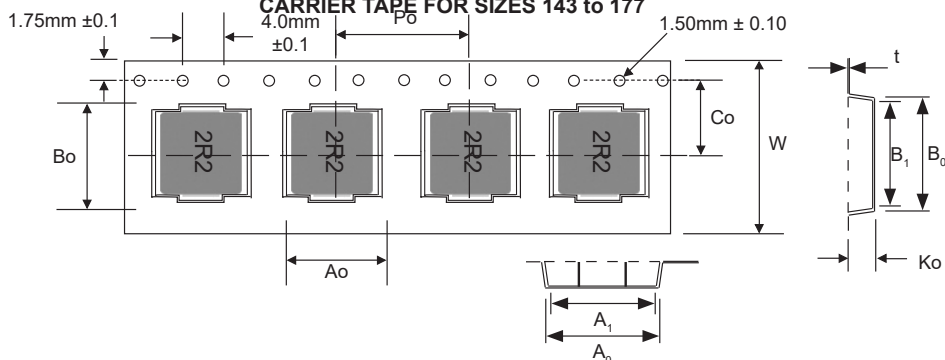
CARRIER TAPE DIMENSIONS (mm)

Series	B ₀	B ₁	A ₀	A ₁	K ₀	P ₀	W	Co	t
NPIM39PA	3.8±0.1		3.5±0.1						
NPIM30PA									
NPIM31PA									
NPIM32PA									
NPIM40PA	5.0±0.1		4.4±0.1		2.3±0.1	8.0±0.1	12.0±0.3	5.5±0.1	0.35±0.05
NPIM41PA									
NPIM42PA									
NPIM59PA	6.2±0.1	n/a	5.5±0.1	n/a					
NPIM50PA									
NPIM51PA									
NPIM52PA									
NPIM53PA									
NPIM79PA	7.7±0.1		7.0±0.1		3.3±0.1	12.0±0.1	16.0±0.3	7.5±0.1	
NPIM70PA									
NPIM71PA									
NPIM72PA									
NPIM73PA									
NPIM74PA									
NPIM75PA									
NPIM83PA	9.0±0.1		8.9±0.1		3.3±0.1				
NPIM104PA	11.6±0.1		10.4±0.1		4.5±0.1				
NPIM105PA									
NPIM143PA	14.1±0.1	13.0±0.1	12.9±0.1	7.0±0.1	6.5±0.1	16.0±0.1	24.0±0.3	11.5±0.1	
NPIM144PA									
NPIM145PA									
NPIM146PA									
NPIM177PA	18.5±0.1	17.5±0.1	17.5±0.1	12.6±0.1	7.5±0.1	24.0±0.1	32.0±0.3	14.2±0.1	0.50±0.05

CARRIER TAPE FOR SIZES 39 to 105

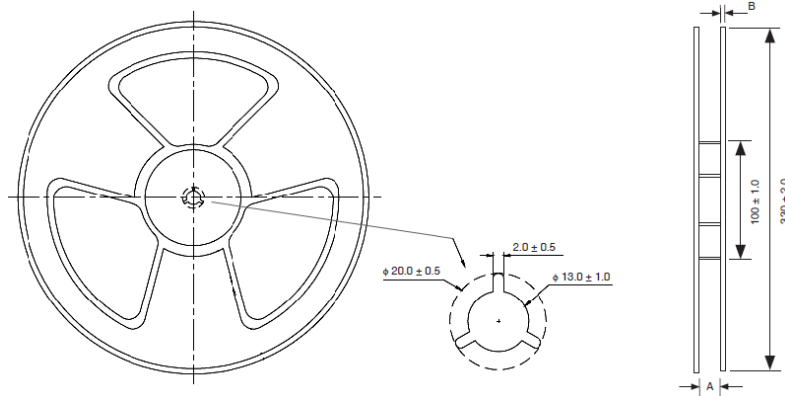


CARRIER TAPE FOR SIZES 143 to 177



REEL DIMENSIONS (mm)

Series	A	B	C	D	Qty/Reel
NPIM39PA	12.4 +2.0/-0				4,000
NPIM30PA					3,000
NPIM31PA					3,000
NPIM32PA					3,000
NPIM40PA					4,000
NPIM41PA					3,500
NPIM42PA					3,000
NPIM59PA					4,000
NPIM50PA					3,500
NPIM51PA					3,000
NPIM52PA					3,000
NPIM53PA					2,000
NPIM79PA					16.4 +2.0/-0
NPIM70PA	2,000				
NPIM71PA	2,000				
NPIM72PA	1,500				
NPIM73PA	1,500				
NPIM74PA	1,000				
NPIM75PA	800				
NPIM83PA	24.4 +2.0/-0				1,000
NPIM104PA					500
NPIM105PA					500
NPIM143PA					500
NPIM144PA					500
NPIM145PA					500
NPIM146PA					500
NPIM177PA	32.4+2.0/-0				200



LAND PATTERN DIMENSIONS (mm)

Series	F	G	H
NPIM39PA	1.9	4.1	1.45
NPIM30PA			
NPIM31PA			
NPIM32PA			
NPIM40PA	2.2	5.2	2.3
NPIM41PA			
NPIM42PA	2.2	5.2	2.4
NPIM59PA	2.2	6.2	2.8
NPIM50PA			
NPIM51PA			
NPIM52PA			
NPIM53PA	2.5	6.5	2.8
NPIM79PA	2.5	7.7	3.0
NPIM70PA	2.5	7.7	3.5
NPIM71PA			
NPIM72PA			
NPIM73PA	2.5	8.4	3.5
NPIM74PA			
NPIM75PA			
NPIM83PA	4.5	10.4	5.2
NPIM104PA	5.4	13.6	3.5
NPIM105PA			
NPIM143PA	8.0	14.2	5.0
NPIM144PA			
NPIM145PA			
NPIM146PA			
NPIM177PA	12.2	18.5	12.5

