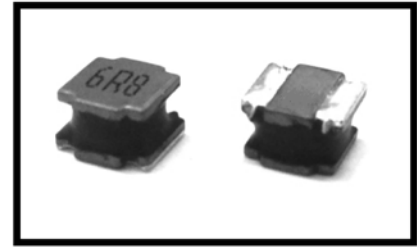


■ PRS系列功率電感 PRS SERIES SMD POWER INDUCTORS

OPERATING TEMP.	-40 ~ +125°C
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● 特征 FEATURES

- 超薄； Low profile.
- 磁屏蔽結構； Magnetic shielded construction.
- 適合表面貼裝； SMT type.

● 應用APPLICATION:

- 手機、掌上電腦、液晶顯示器； Mobile Phone, PDA, LCD display etc.
- DC/DC轉換。 DC/DC converters etc.

● 產品規格型號的表示方法 ORDERING CODE

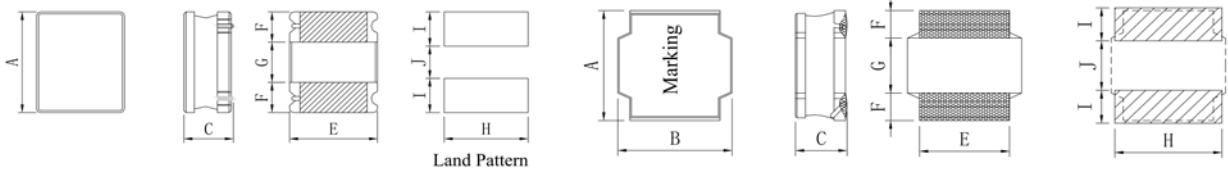
PRS 8040 — 150 M T
 ① ② ③ ④ ⑤

① 產品代號 Product Code		② 規格尺寸(L×W×T) (mm) Dimensions		③ 感量(μH) Inductance		④ 誤差 Tolerance		⑤ 包裝方式 Packaging Style	
PRS	PRS系列 功率電感	3015	3.0×3.0×1.5	1R5	1.5	J	±5%	T	卷帶盤裝 Tape & Reel
		4018	4.0×4.0×1.8	150	15	K	±10%		
		6020	6.0×6.0×2.0	151	150	L	±15%		
		6045	6.0×6.0×4.5	152	1500	M	±20%		
		8040	8.0×8.0×4.0			N	±30%		

● 外形尺寸 SHAPE AND DIMENSIONS

PRS2010\2512

PRS30** ~80**



RECOMMENDED
LAND PATTERNS
單位(Unit): mm

型號Part	A	B	C	E (typ.)	F (typ.)	G (typ.)	H (typ.)	I (typ.)	J (typ.)
PRS2010	2.1±0.2	1.7±0.2	1.0MAX	1.1	0.60	0.8	1.6	0.70	0.70
PRS2512	2.5±0.2	2.1±0.2	1.25MAX	1.6	0.85	0.8	2.1	0.85	0.80
PRS3015	3.0±0.2	3.0±0.2	1.5MAX	2.8	0.85	1.3	3.0	0.90	1.3
PRS4018	4.0±0.2	4.0±0.2	1.8MAX	3.4	1.2	1.6	3.6	1.4	1.6
PRS4020	4.0±0.2	4.0±0.2	2.0MAX	3.4	1.2	1.6	3.6	1.4	1.6
PRS5020	5.0±0.2	5.0±0.2	2.1MAX	4.0	1.2	2.6	4.4	1.6	2.4
PRS5040	5.0±0.2	5.0±0.2	4.2MAX	4.0	1.2	2.6	4.4	1.6	2.4
PRS6020	6.0±0.2	6.0±0.2	2.0MAX	5.0	1.5	3.0	5.7	1.9	2.6
PRS6028	6.0±0.2	6.0±0.2	2.8MAX	5.0	1.5	3.0	5.7	1.9	2.6
PRS6045	6.0±0.2	6.0±0.2	4.5MAX	5.0	1.5	3.0	5.7	1.9	2.6
PRS8040	8.0±0.2	8.0±0.2	4.3MAX	6.4	2.0	4.0	7.5	2.4	3.6

貼片功率電感 SMD POWER INDUCTORS

• 電性能參數 ELECTRICAL CHARACTERISTICS

PRS2010 Series

型號 Part No.	電感量 L (μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR(Ω)Max	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS2010-R16NT	0.16	±30%	1MHz	0.031	4.30	3.20
PRS2010-R24NT	0.24	±30%	1MHz	0.040	3.70	2.90
PRS2010-R33NT	0.33	±30%	1MHz	0.056	2.50	2.90
PRS2010-R47NT	0.47	±30%	1MHz	0.059	2.30	2.35
PRS2010-R68NT	0.68	±30%	1MHz	0.076	1.95	2.05
PRS2010-1R0MT	1.00	±20%	1MHz	0.114	1.65	1.45
PRS2010-1R5MT	1.50	±20%	1MHz	0.174	1.35	1.25
PRS2010-2R2MT	2.20	±20%	1MHz	0.264	1.20	1.10
PRS2010-3R3MT	3.30	±20%	1MHz	0.335	0.90	0.88
PRS2010-4R7MT	4.70	±20%	1MHz	0.479	0.70	0.74
PRS2010-5R6MT	5.60	±20%	1MHz	0.564	0.65	0.62
PRS2010-6R8MT	6.80	±20%	1MHz	0.816	0.60	0.52
PRS2010-8R2MT	8.20	±20%	1MHz	0.948	0.55	0.48
PRS2010-100MT	10.00	±20%	1MHz	1.020	0.50	0.45

PRS2512 Series

型號 Part No.	電感量 L (μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR(Ω)Max	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS2512-R47NT	0.47	±30%	1MHz	0.061	3.82	2.15
PRS2512-R68NT	0.68	±30%	1MHz	0.074	3.28	1.96
PRS2512-1R0NT	1.0	±30%	1MHz	0.090	2.59	1.93
PRS2512-1R5NT	1.5	±30%	1MHz	0.147	2.24	1.40
PRS2512-2R2MT	2.2	±20%	1MHz	0.216	1.85	1.15
PRS2512-3R3MT	3.3	±20%	1MHz	0.264	1.61	1.04
PRS2512-4R7MT	4.7	±20%	1MHz	0.377	1.12	0.84
PRS2512-5R6MT	5.6	±20%	1MHz	0.538	1.12	0.73
PRS2512-6R8MT	6.8	±20%	1MHz	0.581	0.98	0.69
PRS2512-8R2MT	8.2	±20%	1MHz	0.658	0.98	0.65
PRS2512-100MT	10	±20%	1MHz	0.690	0.79	0.62
PRS2512-150MT	15	±20%	1MHz	1.591	0.68	0.42
PRS2512-220MT	22	±20%	1MHz	1.976	0.53	0.38

PRS3015 Series

型號 Part No.	電感量 L (μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR (Ω) ± 20%	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS3015-1R0NT	1.0	±30%	100kHz	0.030	2.32	2.35
PRS3015-1R5NT	1.5	±30%	100kHz	0.040	2.30	1.70
PRS3015-2R2NT	2.2	±30%	100kHz	0.060	1.60	1.60
PRS3015-3R3MT	3.3	±20%	100kHz	0.080	1.32	1.36
PRS3015-4R7MT	4.7	±20%	100kHz	0.120	1.10	1.09
PRS3015-5R6MT	5.6	±20%	100kHz	0.140	0.95	0.86
PRS3015-6R8MT	6.8	±20%	100kHz	0.160	0.87	0.85
PRS3015-8R2MT	8.2	±20%	100kHz	0.220	0.80	0.80
PRS3015-100MT	10	±20%	100kHz	0.230	0.72	0.77
PRS3015-150MT	15	±20%	100kHz	0.360	0.66	0.65
PRS3015-220MT	22	±20%	100kHz	0.520	0.52	0.57
PRS3015-330MT	33	±20%	100kHz	0.840	0.44	0.43
PRS3015-470MT	47	±20%	100kHz	1.340	0.35	0.35

PRS4018 Series

型號 Part No.	電感量 L(μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR (Ω) ± 30%	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS4018-1R0NT	1.0	± 30%	100kHz	0.030	4.30	2.00
PRS4018-1R5NT	1.5	± 30%	100kHz	0.040	3.35	1.80
PRS4018-2R2NT	2.2	± 30%	100kHz	0.045	2.70	1.65
PRS4018-2R7MT	2.7	± 20%	100kHz	0.058	2.30	1.45
PRS4018-3R3MT	3.3	± 20%	100kHz	0.070	2.00	1.23
PRS4018-4R7MT	4.7	± 20%	100kHz	0.090	1.70	1.20
PRS4018-6R8MT	6.8	± 20%	100kHz	0.110	1.45	1.06
PRS4018-8R2MT	8.2	± 20%	100kHz	0.160	1.35	0.90
PRS4018-100MT	10	± 20%	100kHz	0.180	1.30	0.84
PRS4018-150MT	15	± 20%	100kHz	0.250	0.94	0.65
PRS4018-220MT	22	± 20%	100kHz	0.360	0.80	0.59
PRS4018-330MT	33	± 20%	100kHz	0.530	0.65	0.49
PRS4018-470MT	47	± 20%	100kHz	0.650	0.57	0.42
PRS4018-560MT	56	± 20%	100kHz	0.900	0.51	0.38
PRS4018-680MT	68	± 20%	100kHz	1.000	0.47	0.32
PRS4018-820MT	82	± 20%	100kHz	1.300	0.43	0.28
PRS4018-101MT	100	± 20%	100kHz	1.500	0.40	0.25

PRS4020 Series

型號 Part No.	電感量 L(μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR (Ω) ± 30%	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS4020-R33NT	0.33	± 30%	100kHz	0.013	7.50	3.30
PRS4020-R47NT	0.47	± 30%	100kHz	0.022	7.00	3.30
PRS4020-R68NT	0.68	± 30%	100kHz	0.028	6.40	2.80
PRS4020-1R0MT	1.0	± 20%	100kHz	0.029	4.78	2.15
PRS4020-1R5MT	1.5	± 20%	100kHz	0.035	4.45	1.98
PRS4020-2R2MT	2.2	± 20%	100kHz	0.040	3.40	1.85
PRS4020-3R3MT	3.3	± 20%	100kHz	0.070	3.20	1.40
PRS4020-4R7MT	4.7	± 20%	100kHz	0.075	2.35	1.34
PRS4020-5R1MT	5.1	± 20%	100kHz	0.085	2.30	1.27
PRS4020-5R6MT	5.6	± 20%	100kHz	0.090	2.20	1.22
PRS4020-6R8MT	6.8	± 20%	100kHz	0.125	2.20	1.04
PRS4020-8R2MT	8.2	± 20%	100kHz	0.155	1.75	1.04
PRS4020-100MT	10	± 20%	100kHz	0.165	1.60	0.90
PRS4020-150MT	15	± 20%	100kHz	0.230	1.35	0.77
PRS4020-220MT	22	± 20%	100kHz	0.350	1.05	0.62
PRS4020-270MT	27	± 20%	100kHz	0.545	1.02	0.50
PRS4020-330MT	33	± 20%	100kHz	0.550	0.85	0.49
PRS4020-390MT	39	± 20%	100kHz	0.650	0.82	0.46
PRS4020-470MT	47	± 20%	100kHz	0.710	0.74	0.44
PRS4020-560MT	56	± 20%	100kHz	0.800	0.66	0.41
PRS4020-680MT	68	± 20%	100kHz	1.060	0.61	0.36
PRS4020-820MT	82	± 20%	100kHz	1.170	0.50	0.34
PRS4020-101MT	100	± 20%	100kHz	1.550	0.48	0.31

貼片功率電感 SMD POWER INDUCTORS

PRS5020 Series

型號 Part No.	電感量 L(μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR (Ω) ± 30%	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS5020-R47NT	0.47	± 30%	100kHz	0.016	6.15	5.00
PRS5020-R75NT	0.75	± 30%	100kHz	0.018	5.50	4.00
PRS5020-1R0NT	1.0	± 30%	100kHz	0.020	4.40	3.80
PRS5020-1R5NT	1.5	± 30%	100kHz	0.028	4.10	3.20
PRS5020-2R2NT	2.2	± 30%	100kHz	0.033	3.20	2.90
PRS5020-3R3MT	3.3	± 20%	100kHz	0.043	2.55	2.50
PRS5020-4R7MT	4.7	± 20%	100kHz	0.058	2.50	2.20
PRS5020-5R6MT	5.6	± 20%	100kHz	0.068	2.30	2.05
PRS5020-6R8MT	6.8	± 20%	100kHz	0.075	2.05	1.80
PRS5020-8R2MT	8.2	± 20%	100kHz	0.096	1.85	1.65
PRS5020-100MT	10	± 20%	100kHz	0.120	1.70	1.55
PRS5020-150MT	15	± 20%	100kHz	0.165	1.35	1.25
PRS5020-180MT	18	± 20%	100kHz	0.200	1.25	1.15
PRS5020-220MT	22	± 20%	100kHz	0.220	1.15	1.10
PRS5020-330MT	33	± 20%	100kHz	0.350	0.92	0.90
PRS5020-390MT	39	± 20%	100kHz	0.410	0.80	0.75
PRS5020-470MT	47	± 20%	100kHz	0.520	0.77	0.77
PRS5020-560MT	56	± 20%	100kHz	0.600	0.77	0.70
PRS5020-680MT	68	± 20%	100kHz	0.680	0.65	0.64
PRS5020-820MT	82	± 20%	100kHz	0.860	0.55	0.55
PRS5020-101MT	100	± 20%	100kHz	1.100	0.53	0.53

PRS5045 Series

型號 Part No.	電感量 L(μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR (Ω) ± 30%	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS5040-1R0NT	1.0	± 30%	100kHz	0.012	7.35	4.90
PRS5040-1R5NT	1.5	± 30%	100kHz	0.014	6.00	4.50
PRS5040-2R2NT	2.2	± 30%	100kHz	0.018	4.90	3.80
PRS5040-3R3NT	3.3	± 30%	100kHz	0.024	3.95	3.40
PRS5040-4R7NT	4.7	± 30%	100kHz	0.030	3.50	3.00
PRS5040-5R6MT	5.6	± 20%	100kHz	0.040	3.00	2.80
PRS5040-6R8MT	6.8	± 20%	100kHz	0.045	2.90	2.50
PRS5040-8R2MT	8.2	± 20%	100kHz	0.055	2.70	2.30
PRS5040-100MT	10	± 20%	100kHz	0.066	2.35	2.10
PRS5040-150MT	15	± 20%	100kHz	0.090	2.00	2.00
PRS5040-220MT	22	± 20%	100kHz	0.130	1.60	1.50
PRS5040-330MT	33	± 20%	100kHz	0.200	1.30	1.20
PRS5040-390MT	39	± 20%	100kHz	0.230	1.20	1.10
PRS5040-470MT	47	± 20%	100kHz	0.300	1.00	1.00
PRS5040-560MT	56	± 20%	100kHz	0.330	0.95	0.85
PRS5040-680MT	68	± 20%	100kHz	0.420	0.90	0.80
PRS5040-820MT	82	± 20%	100kHz	0.500	0.80	0.75
PRS5040-101MT	100	± 20%	1kHz	0.620	0.75	0.70
PRS5040-151MT	150	± 20%	1kHz	0.850	0.65	0.60
PRS5040-181MT	180	± 20%	1kHz	1.150	0.50	0.43
PRS5040-221MTT	220	± 20%	1kHz	1.200	0.46	0.42

PRS5045 Series

型號 Part No.	電感量 L (μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR (Ω) ± 30%	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS5040-331MT	330	± 30%	1kHz	1.750	0.40	0.36
PRS5040-391MT	390	± 30%	1kHz	2.500	0.35	0.32
PRS5040-471MT	470	± 30%	1kHz	2.850	0.32	0.30
PRS5040-561MT	560	± 20%	1kHz	3.200	0.30	0.28
PRS5040-681MT	680	± 20%	1kHz	3.750	0.27	0.25
PRS5040-821MT	820	± 20%	1kHz	5.700	0.24	0.22
PRS5040-102MT	1000	± 20%	1kHz	6.500	0.21	0.19

PRS6020 Series

型號 Part No.	電感量 L (μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR (Ω) ± 30%	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS6020-1R0NT	1.0	± 30%	100kHz	0.020	4.15	3.50
PRS6020-1R5NT	1.5	± 30%	100kHz	0.022	4.00	3.20
PRS6020-2R2NT	2.2	± 30%	100kHz	0.028	3.75	2.75
PRS6020-3R3MT	3.3	± 20%	100kHz	0.035	3.15	2.60
PRS6020-4R7MT	4.7	± 20%	100kHz	0.058	3.00	2.00
PRS6020-6R8MT	6.8	± 20%	100kHz	0.079	2.20	1.80
PRS6020-100MT	10	± 20%	100kHz	0.105	1.75	1.40
PRS6020-150MT	15	± 20%	100kHz	0.145	1.20	1.20
PRS6020-220MT	22	± 20%	100kHz	0.204	1.05	1.00
PRS6020-330MT	33	± 20%	100kHz	0.300	0.95	0.84
PRS6020-470MT	47	± 20%	100kHz	0.430	0.70	0.65
PRS6020-680MT	68	± 20%	100kHz	0.660	0.62	0.60
PRS6020-101MT	100	± 20%	100kHz	1.200	0.50	0.45

PRS6028 Series

型號 Part No.	電感量 L (μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR (Ω) ± 30%	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS6028-1R0NT	1.0	± 30%	100kHz	0.014	5.75	5.20
PRS6028-1R5NT	1.5	± 30%	100kHz	0.016	5.00	4.58
PRS6028-2R2NT	2.2	± 30%	100kHz	0.020	5.10	3.75
PRS6028-3R3NT	3.3	± 30%	100kHz	0.023	3.60	3.48
PRS6028-4R7NT	4.7	± 30%	100kHz	0.031	2.70	3.08
PRS6028-6R8MT	6.8	± 20%	100kHz	0.048	2.30	2.40
PRS6028-100MT	10	± 20%	100kHz	0.065	1.90	1.95
PRS6028-150MT	15	± 20%	100kHz	0.095	1.60	1.45
PRS6028-220MT	22	± 20%	100kHz	0.135	1.30	1.40
PRS6028-330MT	33	± 20%	100kHz	0.220	1.10	1.22
PRS6028-470MT	47	± 20%	100kHz	0.300	0.95	1.06
PRS6028-680MT	68	± 20%	100kHz	0.420	0.76	0.86
PRS6028-820MT	82	± 20%	100kHz	0.520	0.64	0.70
PRS6028-101MT	100	± 20%	100kHz	0.570	0.62	0.70
PRS6028-151MT	150	± 20%	100kHz	0.760	0.50	0.50
PRS6028-221MT	220	± 20%	100kHz	1.200	0.38	0.38
PRS6028-331MT	330	± 20%	100kHz	1.800	0.32	0.32
PRS6028-471MT	470	± 20%	100kHz	2.300	0.28	0.28
PRS6028-681MT	680	± 20%	100kHz	4.600	0.23	0.23

貼片功率電感 SMD POWER INDUCTORS

PRS6045 Series

型號 Part No.	電感量 L (μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR (Ω) ± 30%	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS6045-R82NT	0.82	±30%	100kHz	0.008	10.35	5.90
PRS6045-1R0NT	1.0	±30%	100kHz	0.014	8.50	5.14
PRS6045-1R3NT	1.3	±30%	100kHz	0.016	8.00	5.05
PRS6045-1R8NT	1.8	±30%	100kHz	0.018	7.00	4.95
PRS6045-2R2NT	2.2	±30%	100kHz	0.021	6.00	4.60
PRS6045-3R0MT	3.0	±20%	100kHz	0.024	5.00	3.80
PRS6045-3R3MT	3.3	±20%	100kHz	0.024	5.00	3.70
PRS6045-4R5MT	4.5	±20%	100kHz	0.031	4.00	3.30
PRS6045-4R7MT	4.7	±20%	100kHz	0.031	4.00	3.30
PRS6045-6R3MT	6.3	±20%	100kHz	0.035	3.80	3.15
PRS6045-6R8MT	6.8	±20%	100kHz	0.038	3.80	3.00
PRS6045-8R2MT	8.2	±20%	100kHz	0.043	3.50	2.70
PRS6045-100MT	10	±20%	100kHz	0.047	3.20	2.45
PRS6045-150MT	15	±20%	100kHz	0.077	2.50	2.05
PRS6045-220MT	22	±20%	100kHz	0.115	2.05	1.80
PRS6045-330MT	33	±20%	100kHz	0.145	1.65	1.45
PRS6045-390MT	39	±20%	100kHz	0.210	1.50	1.25
PRS6045-470MT	47	±20%	100kHz	0.220	1.40	1.20
PRS6045-560MT	56	±20%	100kHz	0.260	1.30	1.10
PRS6045-680MT	68	±20%	100kHz	0.330	1.20	1.00
PRS6045-820MT	82	±20%	100kHz	0.450	1.05	0.90
PRS6045-101MT	100	±20%	100kHz	0.500	0.95	0.80
PRS6045-151MT	150	±20%	100kHz	0.800	0.80	0.70
PRS6045-181MT	180	±20%	100kHz	0.950	0.75	0.65
PRS6045-221MT	220	±20%	100kHz	1.200	0.70	0.59
PRS6045-331MT	330	±20%	100kHz	1.700	0.57	0.57

PRS8040 Series

型號 Part No.	電感量 L (μH)	公差 Tolerance	測試頻率 Test Freq.	直流電阻 DCR (Ω) ± 30%	飽和電流 Isat(A)	溫升電流 Irms(A)
PRS8040-R90NT	0.90	±30%	100kHz	0.006	11.00	7.80
PRS8040-1R4NT	1.4	±30%	100kHz	0.007	9.00	7.00
PRS8040-2R0NT	2.0	±30%	100kHz	0.009	7.40	6.30
PRS8040-2R2NT	2.2	±30%	100kHz	0.009	7.40	6.30
PRS8040-2R8NT	2.8	±30%	100kHz	0.014	5.80	5.10
PRS8040-3R6MT	3.6	±20%	100kHz	0.015	5.30	4.90
PRS8040-4R7MT	4.7	±20%	100kHz	0.018	4.70	4.10
PRS8040-6R8MT	6.8	±20%	100kHz	0.025	4.00	3.70
PRS8040-100MT	10	±20%	100kHz	0.034	3.40	3.10
PRS8040-150MT	15	±20%	100kHz	0.050	2.70	2.40
PRS8040-220MT	22	±20%	100kHz	0.066	2.20	2.20
PRS8040-330MT	33	±20%	100kHz	0.100	1.90	1.70
PRS8040-470MT	47	±20%	100kHz	0.150	1.50	1.40
PRS8040-680MT	68	±20%	100kHz	0.230	1.20	1.10
PRS8040-101MT	100	±20%	100kHz	0.290	1.00	1.00
PRS8040-151MT	150	±20%	100kHz	0.480	0.95	0.85
PRS8040-221MT	220	±20%	100kHz	0.660	0.85	0.80
PRS8040-331MT	330	±20%	100kHz	1.020	0.68	0.64

Isat: 指使電感量比初始值下降30%的電流值,

Irms: 指使電感器表面溫度上升40°C的電流值(參考周圍環境溫度20°C)。

Isat: The DC current is that which cause a 30% inductance reduction from the initial value.

Irms: The DC current is inductor surface temperature to rise by 40°C (Reference ambient temperature 20°C).