

PS Series Shielded SMD Power Inductors



Features

- Low profile
- Magnetic shielded
- SMT type, suitable for reflow soldering.

Application:

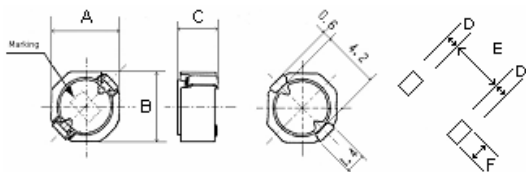
- Portable communication equipment
- Notebook Computer
- DC/DC converters etc.

Part Number System

PS	5020	—	150	M	T
①	②		③	④	⑤

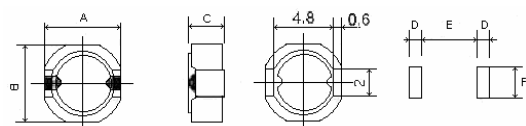
① Code	② Dimensions (L×W×T) (mm)	③ (μH) Inductance	④ Tolerance	⑤ Packaging Style
PS	5020	5.0×5.0×2.0	150 15	T Tape&Reel
	5030	5.0×5.0×3.0	101 100	B Bulk
	6020	6.0×6.0×2.0	102 1000	
	6030	6.0×6.0×3.0		

Dimensions



(Unit): mm

Part	A	B	C	D	E	F
5020	5.0±0.3	5.0±0.3	2.0max	1.0±0.3	3.6±0.3	2.0±0.3
5030	5.0±0.3	5.0±0.3	3.0max	1.0±0.3	3.6±0.3	2.0±0.3



(Unit): mm

Part	A	B	C	D	E	F
6020	6.0±0.3	6.0±0.3	2.0max	1.0±0.3	4.6±0.3	2.6±0.3
6030	6.0±0.3	6.0±0.3	3.0max	1.0±0.3	4.6±0.3	2.6±0.3

Electrical Characteristics

PS5020

Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(mΩ)	Isat (A)	Irms (A)	Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(mΩ)	Isat (A)	Irms (A)
PS5020-1R2M	1.2	±20%	100kHz	44	2.87	2.87	PS5020-150M	15	±20%	100kHz	210	0.85	0.90
PS5020-2R2M	2.2	±20%	100kHz	59	2.17	2.05	PS5020-220M	22	±20%	100kHz	275	0.74	0.82
PS5020-3R3M	3.3	±20%	100kHz	73	1.79	1.81	PS5020-330M	33	±20%	100kHz	455	0.59	0.60
PS5020-4R7M	4.7	±20%	100kHz	87	1.52	1.53	PS5020-470M	47	±20%	100kHz	730	0.49	0.44
PS5020-6R8M	6.8	±20%	100kHz	105	1.27	1.37	PS5020-680M	68	±20%	100kHz	935	0.40	0.41
PS5020-100M	10	±20%	100kHz	150	1.02	1.09	PS5020-101M	100	±20%	100kHz	1500	0.31	0.31

PS5030

Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(mΩ)	Isat (A)	Irms (A)	Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(mΩ)	Isat (A)	Irms (A)
PS5030-1R2M	1.2	±20%	100kHz	20	5.17	4.07	PS5030-150M	15	±20%	100kHz	142	1.40	1.37
PS5030-2R2M	2.2	±20%	100kHz	27	3.90	3.30	PS5030-220M	22	±20%	100kHz	208	1.15	1.01
PS5030-3R3M	3.3	±20%	100kHz	34	3.15	2.83	PS5030-330M	33	±20%	100kHz	257	0.96	0.94
PS5030-4R7M	4.7	±20%	100kHz	45	2.49	2.51	PS5030-470M	47	±20%	100kHz	352	0.83	0.80
PS5030-6R8M	6.8	±20%	100kHz	68	2.01	2.06	PS5030-680M	68	±20%	100kHz	525	0.68	0.65
PS5030-100M	10	±20%	100kHz	90	1.77	1.76	PS5030-101M	100	±20%	100kHz	801	0.58	0.55

Inductance drop 30% typ.at rated Isat. Irms: $\Delta T=40^{\circ}\text{C}$ rise typ. at Irms.

PS6020

Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(mΩ)	Isat (A)	Irms (A)	Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(mΩ)	Isat (A)	Irms (A)
PS6020-1R0M	1.0	±20%	100kHz	16	3.84	3.50	PS6020-120M	12	±20%	100kHz	153	1.10	0.99
PS6020-1R5M	1.5	±20%	100kHz	21	2.99	2.94	PS6020-150M	15	±20%	100kHz	179	0.82	0.94
PS6020-2R2M	2.2	±20%	100kHz	28	2.33	2.47	PS6020-180M	18	±20%	100kHz	207	0.90	0.83
PS6020-3R3M	3.3	±20%	100kHz	47	1.97	1.99	PS6020-220M	22	±20%	100kHz	253	0.74	0.80
PS6020-4R7M	4.7	±20%	100kHz	65	1.54	1.59	PS6020-270M	27	±20%	100kHz	330	0.65	0.65
PS6020-6R8M	6.8	±20%	100kHz	74	1.45	1.49	PS6020-330M	33	±20%	100kHz	455	0.60	0.59
PS6020-8R2M	8.2	±20%	100kHz	102	1.23	1.25	PS6020-390M	39	±20%	100kHz	473	0.56	0.55
PS6020-100M	10	±20%	100kHz	118	1.09	1.22	PS6020-470M	47	±20%	100kHz	542	0.52	0.50

PS6030

Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(mΩ)	Isat (A)	Irms (A)	Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(mΩ)	Isat (A)	Irms (A)
PS6030-1R0M	1.0	±20%	100kHz	11	3.59	4.03	PS6030-220M	22	±20%	100kHz	95	0.77	1.23
PS6030-1R5M	1.5	±20%	100kHz	13	2.93	3.63	PS6030-270M	27	±20%	100kHz	120	0.70	1.08
PS6030-2R2M	2.2	±20%	100kHz	16	2.42	3.30	PS6030-330M	33	±20%	100kHz	140	0.63	0.99
PS6030-3R3M	3.3	±20%	100kHz	21	1.89	2.83	PS6030-390M	39	±20%	100kHz	150	0.58	0.95
PS6030-4R7M	4.7	±20%	100kHz	27	1.66	2.45	PS6030-470M	47	±20%	100kHz	185	0.53	0.84
PS6030-6R8M	6.8	±20%	100kHz	32	1.45	2.20	PS6030-560M	56	±20%	100kHz	220	0.48	0.76
PS6030-100M	10	±20%	100kHz	49	1.14	1.77	PS6030-680M	68	±20%	100kHz	270	0.44	0.69
PS6030-120M	12	±20%	100kHz	52	1.04	1.70	PS6030-820M	82	±20%	100kHz	330	0.40	0.61
PS6030-150M	15	±20%	100kHz	62	0.93	1.55	PS6030-101M	100	±20%	100kHz	415	0.36	0.54
PS6030-180M	18	±20%	100kHz	74	0.85	1.41	PS6030-151M	150	±20%	100kHz	615	0.31	0.42

Inductance drop 30% typ.at rated Isat. Irms: $\Delta T=40^{\circ}\text{C}$ rise typ. at Irms.

PIO Series SMD Power Inductors



Features

Various high power surface mountable type inductors are superior to high saturation

Applications

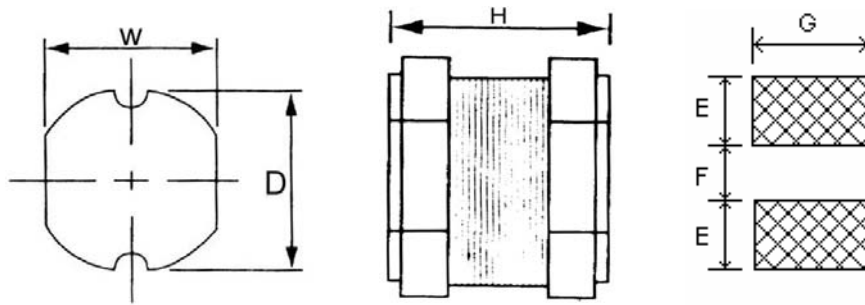
- Portable communication equipment, Notebook Computer
- LCD television
- DC/DC converters.

Part Number System for PIO Series Power Inductors

PIO	54	—	150	M	T
①	②		③	④	⑤

① Code	② Dimensions (L×W×T) (mm)	③ (μH) Inductance	④ Tolerance	⑤ Packaging Style
PIO	43	4.5×4.0×3.2	150 15	T Tape&Reel
	54	5.8×5.2×4.5	101 100	
	73	7.8×7.0×3.5	102 1000	B Bulk
	75	7.8×7.0×5.0		
	104	10.0×9.0×4.0	K ±10%	
	105	10.0×9.0×5.4	L ±15%	
			M ±20%	

Dimensions



(Unit of measure): mm

	PIO43	PIO54	PIO73	PIO75	PIO104	PIO105
D	4.5±0.3	5.8±0.3	7.8±0.3	7.8±0.3	10.0±0.3	10.0±0.3
H	3.2±0.3	4.5±0.3	3.5±0.4	5.0±0.4	4.0±0.4	5.4±0.3
W	4.0±0.3	5.2±0.3	7.0±0.3	7.0±0.3	9.0±0.3	9.0±0.3
E	2.1±0.3	2.5±0.3	3.3±0.3	3.3±0.3	4.4±0.3	4.4±0.3
F	1.0±0.3	1.1±0.3	1.4±0.3	1.4±0.3	1.8±0.3	1.8±0.3
G	4.0±0.3	5.8±0.3	8.0±0.3	8.0±0.3	10.0±0.3	10.0±0.3

Electrical Characteristics

PIO43

Part Number	(μH)	DCR(Ω) MAX	Rated DC Current(A)	Part Number	(μH)	DCR(Ω) MAX	Rated DC Current(A)
PIO43-1R0M	1.0	0.045	3.50	PIO43-100M	10	0.180	1.10
PIO43-1R5M	1.5	0.055	2.85	PIO43-120M	12	0.210	1.00
PIO43-1R8M	1.8	0.060	2.80	PIO43-150M	15	0.235	0.85
PIO43-2R2M	2.2	0.070	2.40	PIO43-180M	18	0.330	0.80
PIO43-2R7M	2.7	0.075	2.30	PIO43-220M	22	0.360	0.70
PIO43-3R3M	3.3	0.085	2.25	PIO43-270M	27	0.520	0.65
PIO43-3R9M	3.9	0.090	1.70	PIO43-330K	33	0.540	0.60
PIO43-4R7M	4.7	0.105	1.65	PIO43-390K	39	0.580	0.55
PIO43-5R6M	5.6	0.120	1.60	PIO43-470K	47	0.840	0.48
PIO43-6R8M	6.8	0.130	1.40	PIO43-560K	56	0.930	0.46
PIO43-8R2M	8.2	0.145	1.30	PIO43-680K	68	1.110	0.44

PIO54

Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)	Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)
PIO54-100M	10	0.10	1.65	PIO54-560K	56	0.40	0.70
PIO54-120M	12	0.12	1.55	PIO54-680K	68	0.45	0.65
PIO54-150M	15	0.14	1.40	PIO54-820K	82	0.60	0.60
PIO54-180M	18	0.15	1.25	PIO54-101K	100	0.70	0.55
PIO54-220M	22	0.18	1.10	PIO54-121K	120	0.85	0.45
PIO54-270M	27	0.20	0.95	PIO54-151K	150	1.10	0.43
PIO54-330L	33	0.22	0.90	PIO54-181K	180	1.35	0.40
PIO54-390L	39	0.30	0.80	PIO54-221K	220	1.55	0.35
PIO54-470L	47	0.35	0.75				

PIO73

Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)	Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)
PIO73-100M	10	0.080	2.10	PIO73-680K	68	0.330	0.75
PIO73-120M	12	0.090	1.80	PIO73-820K	82	0.405	0.70
PIO73-150M	15	0.095	1.70	PIO73-101K	100	0.480	0.65
PIO73-180M	18	0.110	1.40	PIO73-121K	120	0.535	0.60
PIO73-220M	22	0.130	1.35	PIO73-151K	150	0.750	0.55
PIO73-270M	27	0.145	1.25	PIO73-181K	180	1.020	0.50
PIO73-330L	33	0.170	1.05	PIO73-221K	220	1.200	0.45
PIO73-390L	39	0.215	0.95	PIO73-271K	270	1.305	0.37
PIO73-470L	47	0.250	0.90	PIO73-331K	330	1.495	0.35
PIO73-560K	56	0.280	0.80				

PIO75

Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)	Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)
PIO75-100M	10	0.07	2.55	PIO75-820K	82	0.35	0.95
PIO75-120M	12	0.08	2.40	PIO75-101K	100	0.40	0.78
PIO75-150M	15	0.09	2.00	PIO75-121K	120	0.45	0.73
PIO75-180M	18	0.10	1.95	PIO75-151K	150	0.60	0.70
PIO75-220M	22	0.11	1.70	PIO75-181K	180	0.70	0.60
PIO75-270M	27	0.12	1.55	PIO75-221K	220	0.95	0.55
PIO75-330M	33	0.13	1.40	PIO75-271K	270	1.10	0.50
PIO75-390M	39	0.15	1.35	PIO75-331K	330	1.25	0.45
PIO75-470L	47	0.17	1.25	PIO75-391K	390	1.75	0.40
PIO75-560K	56	0.23	1.10	PIO75-471K	470	1.95	0.35
PIO75-680K	68	0.25	1.00				

PIO104

Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)	Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)
PIO104-100M	10	0.05	2.90	PIO104-820K	82	0.25	1.00
PIO104-120M	12	0.06	2.80	PIO104-101K	100	0.30	0.95
PIO104-150M	15	0.07	2.30	PIO104-121K	120	0.40	0.90
PIO104-180M	18	0.08	2.15	PIO104-151K	150	0.50	0.80
PIO104-220M	22	0.09	2.10	PIO104-181K	180	0.62	0.70
PIO104-270M	27	0.10	1.90	PIO104-221K	220	0.72	0.65
PIO104-330L	33	0.12	1.85	PIO104-271K	270	0.95	0.57
PIO104-390L	39	0.15	1.45	PIO104-331K	330	1.10	0.55
PIO104-470L	47	0.17	1.35	PIO104-391K	390	1.20	0.50
PIO104-560K	56	0.20	1.30	PIO104-471K	470	1.52	0.45
PIO104-680K	68	0.22	1.20	PIO104-561K	560	1.90	0.40

PIO105

Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)	Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)
PIO105-100M	10	0.06	3.80	PIO105-101K	100	0.33	1.15
PIO105-120M	12	0.07	3.40	PIO105-121K	120	0.40	1.00
PIO105-150M	15	0.08	2.90	PIO105-151K	150	0.45	0.95
PIO105-180M	18	0.09	2.65	PIO105-181K	180	0.60	0.85
PIO105-220M	22	0.10	2.50	PIO105-221K	220	0.70	0.75
PIO105-270M	27	0.11	2.25	PIO105-271K	270	0.95	0.70
PIO105-330L	33	0.12	2.00	PIO105-331K	330	1.10	0.60
PIO105-390L	39	0.13	1.90	PIO105-391K	390	1.20	0.55
PIO105-470L	47	0.15	1.70	PIO105-471K	470	1.45	0.50

PIO105 continued

Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)	Part Number	(μ H)	DCR(Ω) MAX	Rated DC Current(A)
PIO105-560K	56	0.19	1.60	PIO105-561K	560	1.90	0.48
PIO105-680K	68	0.22	1.45	PIO105-681K	680	2.25	0.45
PIO105-820K	82	0.25	1.30	PIO105-821K	820	2.50	0.40

Inductance tolerance: K: $\pm 10\%$ L: $\pm 15\%$ M: $\pm 20\%$

Measurement Freq(L): 1.0 μ H~8.2 μ H(7.96MHz) 10 μ H~82 μ H(2.52MHz) 100 μ H~680 μ H(1KHz)

Rated Current applied when inductance drop not more than 10% or temperature rise $\Delta t \leq 40^\circ\text{C}$ whichever is lower.

MS Series SMD Power Inductors



Features

- High saturation current
- Magnetic shielded
- SMT type, suitable for reflow soldering.

Application:

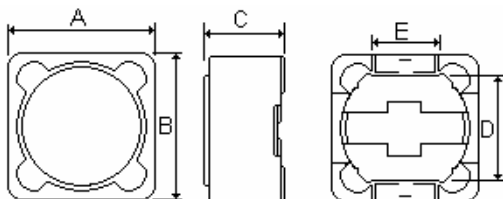
- OEM equipment, Notebook Computer
- LCD televisions
- DC/DC converters etc

PART NUMBER

MS		127		—	101		M	T			
①		②			③		④	⑤			
①		②			③		④	⑤			
Code		Dimensions (L×W×T) (mm)			Inductance (μH)		Tolerance		Packaging Style		
MS		62	6.2×6.2×3.4		150	15	K	±10%		T	Tape&Reel
		73	7.3×7.3×3.4								
		74	7.4×7.4×4.5		101	100	M	±20%		B	Bulk
		124	12.0×12.0×4.5		102	1000					
		125	12.0×12.0×6.0								
		127	12.0×12.0×8.0								

Dimensions

(Unit): mm



Part #	A	B	C	D	E
MS62	6.2	6.2	3.0		
MS73	7.3	7.3	3.4	5.8	2.0
MS74	7.3	7.3	4.5	5.8	2.0
MS124	12.0	12.0	4.5	7.6	5.0
MS125	12.0	12.0	6.0	7.6	5.0
MS127	12.0	12.0	8.0	7.6	5.0

Electrical Characteristics

MS73

Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)	Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)
MS73-100MT	10	±20%	1kHz	0.072	1.68	MS73-121MT	120	±20%	1kHz	0.890	0.49
MS73-120MT	12	±20%	1kHz	0.098	1.52	MS73-151MT	150	±20%	1kHz	1.270	0.43
MS73-150MT	15	±20%	1kHz	0.130	1.33	MS73-181MT	180	±20%	1kHz	1.450	0.39
MS73-180MT	18	±20%	1kHz	0.140	1.20	MS73-221MT	220	±20%	1kHz	1.650	0.35
MS73-220MT	22	±20%	1kHz	0.190	1.07	MS73-271MT	270	±20%	1kHz	2.310	0.32
MS73-270MT	27	±20%	1kHz	0.210	0.96	MS73-331MT	330	±20%	1kHz	2.620	0.28
MS73-330MT	33	±20%	1kHz	0.240	0.91	MS73-391MT	390	±20%	1kHz	2.940	0.26
MS73-390MT	39	±20%	1kHz	0.320	0.77	MS73-471MT	470	±20%	1kHz	4.180	0.24
MS73-470MT	47	±20%	1kHz	0.360	0.76	MS73-561MT	560	±20%	1kHz	4.670	0.22
MS73-560MT	56	±20%	1kHz	0.470	0.68	MS73-681MT	680	±20%	1kHz	5.730	0.19
MS73-680MT	68	±20%	1kHz	0.520	0.61	MS73-821MT	820	±20%	1kHz	6.540	0.18
MS73-820MT	82	±20%	1kHz	0.690	0.57	MS73-102MT	1000	±20%	1kHz	9.440	0.16
MS73-101MT	100	±20%	1kHz	0.790	0.50						

MS74

Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)	Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)
MS74-100MT	10	±20%	1kHz	0.049	1.84	MS74-121MT	120	±20%	1kHz	0.660	0.52
MS74-120MT	12	±20%	1kHz	0.058	1.71	MS74-151MT	150	±20%	1kHz	0.880	0.46
MS74-150MT	15	±20%	1kHz	0.081	1.47	MS74-181MT	180	±20%	1kHz	0.980	0.42
MS74-180MT	18	±20%	1kHz	0.091	1.31	MS74-221MT	220	±20%	1kHz	1.170	0.36
MS74-220MT	22	±20%	1kHz	0.110	1.23	MS74-271MT	270	±20%	1kHz	1.640	0.34
MS74-270MT	27	±20%	1kHz	0.150	0.12	MS74-331MT	330	±20%	1kHz	1.860	0.32
MS74-330MT	33	±20%	1kHz	0.170	0.96	MS74-391MT	390	±20%	1kHz	2.850	0.29
MS74-390MT	39	±20%	1kHz	0.230	0.91	MS74-471MT	470	±20%	1kHz	3.010	0.26
MS74-470MT	47	±20%	1kHz	0.260	0.88	MS74-561MT	560	±20%	1kHz	3.620	0.23
MS74-560MT	56	±20%	1kHz	0.350	0.75	MS74-681MT	680	±20%	1kHz	4.630	0.22
MS74-680MT	68	±20%	1kHz	0.380	0.69	MS74-821MT	820	±20%	1kHz	5.200	0.20
MS74-820MT	82	±20%	1kHz	0.430	0.61	MS74-102MT	1000	±20%	1kHz	6.000	0.18
MS74-101MT	100	±20%	1kHz	0.610	0.60						

MS124

Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)	Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)
MS124-3R9MT	3.9	±20%	100kHz	0.015	6.50	MS124-470MT	47	±20%	100kHz	0.150	1.90
MS124-4R7MT	4.7	±20%	100kHz	0.018	5.70	MS124-560MT	56	±20%	100kHz	0.190	1.80
MS124-6R8MT	6.8	±20%	100kHz	0.023	4.90	MS124-680MT	68	±20%	100kHz	0.220	1.50
MS124-100MT	10	±20%	100kHz	0.028	4.50	MS124-820MT	82	±20%	100kHz	0.260	1.30
MS124-120MT	12	±20%	100kHz	0.038	4.00	MS124-101MT	100	±20%	100kHz	0.308	1.20
MS124-150MT	15	±20%	100kHz	0.050	3.20	MS124-121MT	120	±20%	100kHz	0.380	1.10
MS124-180MT	18	±20%	100kHz	0.057	3.10	MS124-151MT	150	±20%	100kHz	0.530	0.95
MS124-220MT	22	±20%	100kHz	0.066	2.90	MS124-181MT	180	±20%	100kHz	0.620	0.85
MS124-270MT	27	±20%	100kHz	0.080	2.80	MS124-221MT	220	±20%	100kHz	0.700	0.80
MS124-330MT	33	±20%	100kHz	0.097	2.70	MS124-271MT	270	±20%	100kHz	0.876	0.60
MS124-390MT	39	±20%	100kHz	0.132	2.10	MS124-331MT	330	±20%	100kHz	0.990	0.50

MS125

Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)	Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)
MS125-1R3MT	1.3	±20%	7.96MHz	0.012	8.00	MS125-680MT	68	±20%	1kHz	0.120	1.50
MS125-2R1MT	2.1	±20%	7.96MHz	0.014	7.00	MS125-820MT	82	±20%	1kHz	0.140	1.40
MS125-3R1MT	3.1	±20%	7.96MHz	0.017	6.00	MS125-101MT	100	±20%	1kHz	0.160	1.30
MS125-4R4MT	4.4	±20%	7.96MHz	0.020	5.00	MS125-121MT	120	±20%	1kHz	0.170	1.10
MS125-5R8MT	5.8	±20%	7.96MHz	0.021	4.40	MS125-151MT	150	±20%	1kHz	0.230	1.00
MS125-7R5MT	7.5	±20%	7.96MHz	0.024	4.20	MS125-181MT	180	±20%	1kHz	0.290	0.90
MS125-100MT	10	±20%	1kHz	0.025	4.00	MS125-221MT	220	±20%	1kHz	0.400	0.80
MS125-120MT	12	±20%	1kHz	0.027	3.50	MS125-271MT	270	±20%	1kHz	0.460	0.75
MS125-150MT	15	±20%	1kHz	0.030	3.30	MS125-331MT	330	±20%	1kHz	0.510	0.68
MS125-180MT	18	±20%	1kHz	0.034	3.00	MS125-391MT	390	±20%	1kHz	0.690	0.65
MS125-220MT	22	±20%	1kHz	0.036	2.80	MS125-471MT	470	±20%	1kHz	0.770	0.58
MS125-270MT	27	±20%	1kHz	0.051	2.30	MS125-561MT	560	±20%	1kHz	0.860	0.54

MS125 continued

Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)	Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)
MS125-330MT	33	±20%	1kHz	0.057	2.10	MS125-681MT	680	±20%	1kHz	1.200	0.48
MS125-390MT	39	±20%	1kHz	0.068	2.00	MS125-821MT	820	±20%	1kHz	1.340	0.43
MS125-470MT	47	±20%	1kHz	0.075	1.80	MS125-102MT	1000	±20%	1kHz	1.530	0.40
MS125-560MT	56	±20%	1kHz	0.110	1.70						

MS127

Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)	Part Number	L(μH)	Tolerance	Test Freq.	Max DCR(Ω)	IDC(A)
MS127-1R2MT	1.2	±20%	100kHz	0.007	9.80	MS127-680MT	68	±20%	1kHz	0.140	2.10
MS127-2R4MT	2.4	±20%	100kHz	0.0115	8.00	MS127-820MT	82	±20%	1kHz	0.160	1.95
MS127-3R5MT	3.5	±20%	100kHz	0.0135	7.50	MS127-101MT	100	±20%	1kHz	0.220	1.70
MS127-4R7MT	4.7	±20%	100kHz	0.0158	6.80	MS127-121MT	120	±20%	1kHz	0.250	1.60
MS127-6R1MT	6.1	±20%	100kHz	0.0176	6.60	MS127-151MT	150	±20%	1kHz	0.280	1.42
MS127-7R6MT	7.6	±20%	100kHz	0.0200	5.90	MS127-181MT	180	±20%	1kHz	0.350	1.30
MS127-100MT	10	±20%	1kHz	0.0216	5.40	MS127-221MT	220	±20%	1kHz	0.390	1.16
MS127-120MT	12	±20%	1kHz	0.0243	4.90	MS127-271MT	270	±20%	1kHz	0.560	1.06
MS127-150MT	15	±20%	1kHz	0.0270	4.50	MS127-331MT	330	±20%	1kHz	0.640	0.95
MS127-180MT	18	±20%	1kHz	0.0392	3.90	MS127-391MT	390	±20%	1kHz	0.700	0.88
MS127-220MT	22	±20%	1kHz	0.0432	3.60	MS127-471MT	470	±20%	1kHz	0.980	0.79
MS127-270MT	27	±20%	1kHz	0.0459	3.40	MS127-561MT	560	±20%	1kHz	1.070	0.73
MS127-330MT	33	±20%	1kHz	0.0648	3.00	MS127-681MT	680	±20%	1kHz	1.460	0.67
MS127-390MT	39	±20%	1kHz	0.0729	2.75	MS127-821MT	820	±20%	1kHz	1.640	0.60
MS127-470MT	47	±20%	1kHz	0.1000	2.50	MS127-102MT	1000	±20%	1kHz	1.820	0.55
MS127-560MT	56	±20%	1kHz	0.110	2.35						

Inductance drop 25% typ., $\Delta T=40^{\circ}\text{C}$ rise typ. at rated Current.

BTC Coils



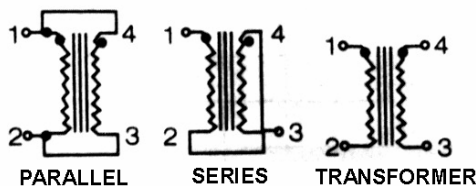
Features:

- Higher Frequency
- High Saturation Material
- Low EMI Radiation
- Low DC Resistance

Application:

- DC-DC Conversion (Paraller Mode)
- Isolation/Coupling (Transformer)
- Input Filter (Serial Mode)
- EMI/RFI Suppression

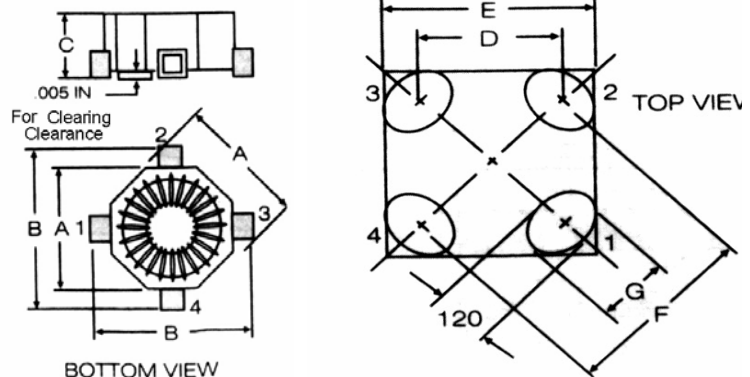
CONNECTION DIAGRAMS



Case Size	A	B	C	D	E	F	G
BTC-01	.350	.450	.165	.277	.422	.392	.145
BTC-02	.350	.450	.235	.277	.422	.392	.145
BTC-03	.450	.550	.190	.348	.492	.492	.160
BTC-04	.450	.550	.250	.348	.492	.492	.160

Dimensions in inches, typical

MECHANICAL DIAGRAM · RECOMENDED LAYOUT



Electrical Characteristics

Part Number	PARALLEL			SERIES		
	Open Circuit Inductance μ H	IDC A	DCR Ω	Open Circuit Inductance μ H	IDC A	DCR Ω
BTC-R47-01	0.42	5.50	0.006	1.67	2.75	0.022
BTC-R68-01	0.60	5.10	0.007	2.40	2.55	0.025
BTC-1R0-01	1.07	4.50	0.008	4.28	2.25	0.032
BTC-2R0-01	2.02	3.40	0.014	8.08	1.70	0.054
BTC-5R0-01	4.83	2.00	0.041	19.31	1.00	0.161
BTC-8R0-01	8.08	1.80	0.052	32.33	0.90	0.208
BTC-100-01	9.62	1.70	0.057	38.48	0.85	0.227
BTC-150-01	15.03	1.40	0.087	60.12	0.70	0.348
BTC-200-01	20.46	1.00	0.159	81.83	0.50	0.634
BTC-250-01	25.40	0.96	0.177	101.60	0.48	0.708
BTC-330-01	32.33	0.80	0.251	129.32	0.40	1.001
BTC-500-01	50.52	0.70	0.316	202.07	0.35	1.263
BTC-680-01	68.40	0.66	0.373	273.61	0.33	1.490
BTC-101-01	99.01	0.54	0.557	396.06	0.27	2.227
BTC-151-01	150.72	0.44	0.844	602.87	0.22	3.376
BTC-201-01	198.41	0.36	1.208	793.65	0.18	4.831
BTC-301-01	299.87	0.32	1.525	1199.46	0.16	6.100
Part Number	PARALLEL			SERIES		
	Open Circuit Inductance μ H	IDC A	DCR Ω	Open Circuit Inductance μ H	IDC A	DCR Ω
BTC-R47-02	0.54	5.90	0.006	2.18	2.95	0.024
BTC-R68-02	0.85	5.40	0.008	3.40	2.70	0.029
BTC-1R0-02	1.22	5.00	0.009	4.90	2.50	0.034
BTC-2R0-02	2.18	3.90	0.014	8.70	1.95	0.056
BTC-5R0-02	4.90	2.50	0.032	19.58	1.25	0.128
BTC-8R0-02	7.65	2.30	0.040	30.60	1.15	0.159
BTC-100-02	9.83	2.10	0.045	39.30	1.05	0.179
BTC-150-02	14.99	1.60	0.085	59.98	0.80	0.339
BTC-200-02	19.58	1.50	0.097	78.34	0.75	0.387
BTC-250-02	24.79	1.40	0.109	99.14	0.70	0.436
BTC-330-02	32.67	1.30	0.126	130.70	0.65	0.503
BTC-500-02	49.10	0.82	0.306	196.38	0.41	1.221
BTC-680-02	68.85	0.76	0.362	275.40	0.38	1.447
BTC-101-02	99.14	0.62	0.541	396.58	0.31	2.162
BTC-151-02	148.10	0.56	0.666	592.42	0.28	2.661
BTC-201-02	201.59	0.46	0.951	806.34	0.23	3.804
BTC-301-02	300.42	0.42	1.176	1201.70	0.21	4.703

Part Number	PARALLEL			SERIES		
	Open Circuit Inductance μ H	IDC A	DCR Ω	Open Circuit Inductance μ H	IDC A	DCR Ω
BTC-R47-03	0.46	6.20	0.007	1.85	3.10	0.025
BTC-R68-03	0.67	5.70	0.008	2.66	2.85	0.029
BTC-1R0-03	0.91	5.40	0.009	3.63	2.70	0.033
BTC-2R0-03	1.85	4.60	0.012	7.40	2.30	0.045
BTC-5R0-03	4.74	3.20	0.023	18.94	1.60	0.090
BTC-8R0-03	8.16	2.80	0.030	32.63	1.40	0.119
BTC-100-03	9.79	2.70	0.033	39.15	1.35	0.132
BTC-150-03	14.50	2.20	0.050	58.02	1.10	0.198
BTC-200-03	20.15	1.50	0.111	80.59	0.75	0.443
BTC-250-03	25.33	1.40	0.125	101.31	0.70	0.499
BTC-330-03	32.63	1.30	0.143	130.54	0.65	0.571
BTC-500-03	50.02	0.92	0.277	200.10	0.46	1.108
BTC-680-03	68.84	0.84	0.328	275.35	0.42	1.312
BTC-101-03	101.31	0.68	0.502	405.22	0.34	2.005
BTC-151-03	149.85	0.64	0.621	599.40	0.32	2.484
BTC-201-03	200.10	0.60	0.732	800.38	0.30	2.925
BTC-301-03	298.39	0.50	0.926	1193.55	0.25	3.702

Part Number	PARALLEL			SERIES		
	Open Circuit Inductance μ H	IDC A	DCR Ω	Open Circuit Inductance μ H	IDC A	DCR Ω
BTC-R47-04	0.49	7.90	0.005	1.95	3.95	0.019
BTC-R68-04	0.76	7.20	0.006	3.05	3.60	0.023
BTC-1R0-04	1.10	5.90	0.009	4.39	2.95	0.034
BTC-2R0-04	1.95	4.60	0.014	7.81	2.30	0.055
BTC-5R0-04	5.15	3.30	0.027	20.62	1.65	0.107
BTC-8R0-04	7.81	3.00	0.033	31.23	1.50	0.131
BTC-100-04	9.88	2.50	0.047	39.53	1.25	0.187
BTC-150-04	14.76	2.30	0.057	59.05	1.15	0.228
BTC-200-04	20.62	1.90	0.085	82.47	0.95	0.337
BTC-250-04	25.65	1.60	0.116	102.60	0.80	0.462
BTC-330-04	33.21	1.30	0.166	132.86	0.65	0.663
BTC-500-04	48.80	1.20	0.202	195.20	0.60	0.805
BTC-680-04	67.37	1.10	0.238	269.50	0.55	0.952
BTC-101-04	99.09	0.72	0.565	396.38	0.36	2.259
BTC-151-04	149.45	0.64	0.696	597.80	0.32	2.784
BTC-201-04	200.11	0.60	0.810	800.44	0.30	3.240
BTC-301-04	298.93	0.54	1.003	1195.72	0.27	4.011