

# Power Choke Coil

## PCMC series, PCMB series



- Small size of 7.3mm×6.6mm and low tap of 3.0mm max
- Excellent loss characteristics and high saturation current

### Applications

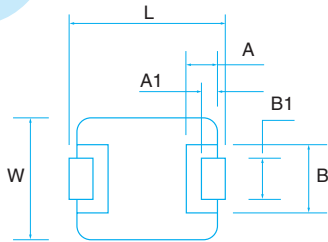
- \*High speed drive DC/DC inverter for server, router etc.
- \*CPU power for note PC and desktop PC

RoHS compliant

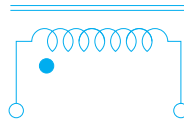
Completely lead free

## SPECIFICATIONS

### Mechanical



### Equivalent circuit



Dimension (Inch Size)	PCMC063	PCMC103		PCMC104		PCMC105T	PCMC133	PCMC135
		103T	103E	104T	104E			
L	7.3max.	11.5±0.35		11.5max.		11.15±0.35	13.8max.	13.8max.
W	6.6±0.2	10±0.3		10±0.2		10±0.3	12.6±0.2	12.6±0.2
T	3.0max.	2.8±0.2	3.3±0.2	4.0max.	4.5max.	4.8±0.2	3.5max.	5.0max.
A	2.0±0.1	2.5±0.1		2.5±0.1		2.5±0.1	2.5±0.1	2.5±0.1
A1	1.3±0.3	2.0±0.5		2.0±0.5		2.0±0.5	2.0±0.5	2.0±0.5
B	3.6±0.2	5.0±0.2		5.0±0.2		5.0±0.2	6.0±0.2	6.0±0.2
B1	3.0±0.3	3.0±0.2		3.0±0.2		3.0±0.2	4.0±0.3	4.0±0.3

(unit : mm)

### Electrical

#### 063 type

PCMC063T-***MN	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
PCMC063T-R10MN	0.10	1.5	1.7	32.5	60.0
PCMC063T-R20MN	0.20	2.4	3.0	24.0	41.0
PCMC063T-R22MN	0.22	2.5	2.8	23.0	40.0
PCMC063T-R33MN	0.33	3.5	3.9	20.0	30.0
PCMC063T-R47MN	0.47	4.0	4.2	17.5	26.0
PCMC063T-R68MN	0.68	5.0	5.5	15.5	25.0
PCMC063T-R82MN	0.82	6.7	8.0	13.0	24.0
PCMC063T-1R0MN	1.00	9.0	10.0	11.0	22.0
PCMC063T-1R2MN	1.20	10.0	12.0	10.0	20.0
PCMC063T-1R5MN	1.50	14.0	15.0	9.0	18.0
PCMC063T-2R2MN	2.20	18.0	20.0	8.0	14.0
PCMC063T-3R3MN	3.30	28.0	30.0	6.0	13.5
PCMC063T-4R7MN	4.70	37.0	40.0	5.5	10.0
PCMC063T-6R8MN	6.80	54.0	60.0	4.5	8.0

PCMB063T-***M*	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
PCMB063T-8R2MS	8.20	54.0	60.0	4.5	6.0
PCMB063T-100MS	10.00	62.0	68.0	4.0	5.5
PCMB063T-1R0MT	1.00	6.7	7.5	14.0	12.0
PCMB063T-2R2MT	2.20	14.3	15.5	10.0	10.0
PCMB063T-3R3MT	3.30	22.6	24.0	8.5	8.0
PCMB063T-4R7MT	4.70	32.5	35.0	7.0	5.0

Rated current : Current that will increase temperature by 40°C

Saturating current : The current that reduces inductance by 20% (PCMC), 30% (PCMB)

Packaging : 500 piece reel for PCMC135T, PCMC133E, PCMC (B) 104, 1000 piece reel for PCMC (B) 063T

#### 103, 104, 105 type

PCMC104T-***MN	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
PCMC104T-R22MN	0.22	0.90	1.00	35.0	60.0
PCMC104T-R68MN	0.68	2.40	2.70	22.0	39.0
PCMC104T-R88MN	0.88	2.70	3.00	20.0	38.0
PCMC104T-1R5MN	1.50	3.80	4.20	16.0	33.0
PCMC104T-2R2MN	2.20	6.70	7.00	12.0	27.0

PCMB104T-***MN 103, 105	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
PCMB103T-R36MS	0.36	1.30	1.6	23.0	28.0
PCMB103T-R47MS	0.47	2.10	2.5	20.0	26.0
PCMB103T-8R2MS	8.20	35.00	45.0	5.0	8.5
PCMB103E-1R0MS	1.00	2.70	3.0	20.0	27.0
PCMB104T-R36MT	0.36	1.05	1.2	30.0	50.0
PCMB104T-R56MT	0.56	1.60	1.8	25.0	33.0
PCMB104T-1R0MT	1.00	3.00	3.3	18.0	28.0
PCMB104T-1R8MS	1.80	4.50	5.0	15.0	15.0
PCMB104T-2R0MS	2.00	5.20	5.8	14.0	14.0
PCMB104T-2R2MS	2.20	6.00	7.0	12.0	18.0
PCMB104E-2R2MS	2.20	5.80	7.0	14.0	16.0
PCMB104T-3R3MS	3.30	10.80	11.8	10.0	16.0
PCMB104E-3R3MS	3.30	11.00	13.2	11.0	14.5
PCMB104E-4R7MS	4.70	13.20	15.0	10.0	13.0
PCMB104E-6R8MS	6.80	21.50	24.0	7.5	9.5
PCMB104T-100MS	10.00	27.50	30.0	6.0	6.0
PCMB105T-R47MS	0.47	0.95	1.1	36.0	50.0

#### 133 type

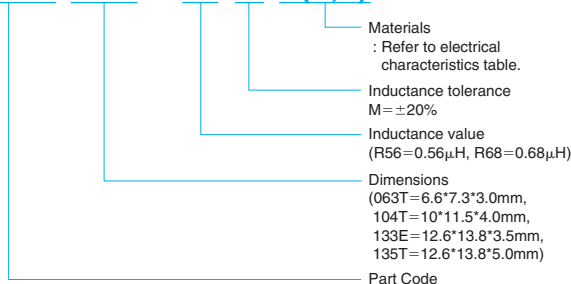
PCMC133E-***MF	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
PCMC133E-R56MF	0.56	1.80	2.20	29	51
PCMC133E-R68MF	0.68	2.30	2.50	28	49
PCMC133E-1R0MF	1.00	3.30	3.50	24	40
PCMC133E-2R2MF	2.20	7.20	8.00	16	29

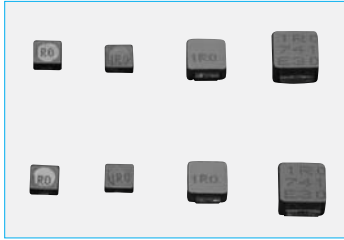
#### 135 type

PCMC135T-***MF	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
PCMC135T-R36MF	0.36	0.77	1.10	41	75
PCMC135T-R47MF	0.47	1.10	1.30	38	65
PCMC135T-R50MF	0.50	1.20	1.50	36	55
PCMC135T-R56MF	0.56	1.20	1.50	36	55
PCMC135T-R62MF	0.62	1.50	1.70	34	54
PCMC135T-R68MF	0.68	1.50	1.70	34	54
PCMC135T-1R0MF	1.00	2.10	2.50	29	50
PCMC135T-1R5MF	1.50	3.40	4.10	23	48
PCMC135T-2R2MF	2.20	4.60	5.50	20	32
PCMC135T-3R3MF	3.30	7.70	9.20	15	32

## PART NUMBER

PCMC 13\*\* - \*\*\* M N(S,T)





# Small Power Choke Coil

## PCMC(B) series, PW.PS series



Low DCR, small size with high current capability, high efficiency and low loss.

### Applications

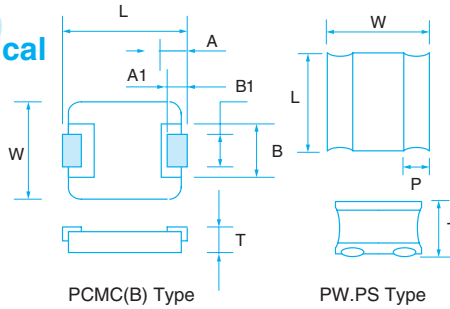
Small electronics equipment for communication, information, imaging, audio etc.

RoHS compliant

Completely lead free

## SPECIFICATIONS

### Mechanical



PCMC(B) Type

PW.PS Type

Dimension (mm)	PCMC(B) Type	
	PCMC(B)042T	PCMC053T
L	4.5max.	5.2max.
W	4.0±0.3	4.7±0.2
T	2.0max.	3.0max.
A	1.0±0.1	1.5±0.1
A1	0.8±0.3	1.0±0.3
B	2.2±0.2	1.8±0.2
B1	1.5±0.3	

Dimension (mm)	PW		PS031		PS041B
	021T Type	25201B Type	031T Type	031B Type	
L	1.9±0.2	1.95±0.1	2.9±0.2		3.8±0.2
W	1.9±0.2	2.45±0.1	2.9±0.2		3.8±0.2
P	0.4±0.2		0.75±0.2		1.0±0.2
T	1.0±0.1	1.2±0.1	1.0±0.1	1.2±0.1	1.2±0.1

### Electrical

PW type

PW021T-***MS	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
R50	0.5	85	100	1.50	2.40
1R0	1.0	120	150	1.20	1.80
2R2	2.2	300	350	0.85	1.20
3R3	3.3	430	500	0.75	0.98
4R7	4.7	600	700	0.65	0.80
6R8	6.8	780	900	0.55	0.73
100	10.0	1200	1400	0.45	0.61

PW25201BT-***MS	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
R47	0.47	47	56	2.20	3.70
1R0	1.0	73	88	1.80	2.70
1R5	1.5	105	126	1.50	2.10
2R2	2.2	129	155	1.30	1.70
3R3	3.3	227	272	1.00	1.30
4R7	4.7	338	406	0.80	1.15

PCMC(B) type

PCMC042T-***MN	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
R10	0.10	4.5	5.0	11	30
R22	0.22	7.3	8.0	9	17
R47	0.47	14.0	15.5	6	11.5
1R0	1.00	32.0	36.0	3.8	8.5

PCMB042T-***MS	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
R10	0.10	3.5	4.0	12	22
R22	0.22	6.0	6.6	9	13
R47	0.47	12.5	12.0	7	9.5
1R0	1.00	24.0	27.0	4.5	7.0
1R5	1.50	38.0	46.0	4.0	6.0
2R2	2.20	52.0	58.0	3.0	5.0

PCMC053T-***MN	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
R68	0.68	11.0	12.0	8.5	14.0
1R0	1.0	13.0	14.0	7.0	11.0
1R2	1.2	15.0	16.0	6.5	11.0
1R5	1.5	18.0	20.0	6.0	10.0
2R2	2.2	29.0	35.0	5.5	9.0
3R3	3.3	32.0	38.0	5.0	7.0

PS type

PS031B-***MS	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
2R2	2.2	75	90	1.40	1.10
4R7	4.7	120	140	1.20	0.77
6R8	6.8	160	190	1.00	0.67
100	10.0	260	300	0.90	0.54

PS031T-***MS	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
2R2	2.2	90	105	1.30	1.10
3R3	3.3	130	150	1.20	0.90
4R7	4.7	170	200	1.00	0.75
6R8	6.8	200	230	0.90	0.65
100	10.0	300	340	0.80	0.52

PS041B-***MS	L0(μH) Inductance	Rdc(mΩ)		Rated current (A)	Saturation current (A)
		Typical	MAX.		
2R2	2.2	80	95	1.30	1.70
3R3	3.3	100	120	1.10	1.40
4R7	4.7	120	145	1.00	1.15
6R8	6.8	180	216	0.84	1.00

Rated current : Current that will increase temperature by 40°C  
 Saturating current : The current that decreases inductance by 30%  
 for PS and PW. 20% for PCMC (B)

Packaging : 2,000 piece reel for PW, PS031T(B),  
 1000 piece reel for PCMC042T, PCMC053T

## PART NUMBER

PS 031\* - \*\*\* M (S)

