DIP Power Inductors

MC Series

PRODUCT IDENTIFICATION

MC □□□□ - □□□ □ - □□

- Internal No.
- Tolerance
- Inductance
- Dimensions
- Product Symbol

■ Tolerance: J = ±5%, K = ±10%, L = ±15%, M = ±20%, P = ±25%, N = ±30%, Y = min

■ Internal No.: HF = Halogen Free

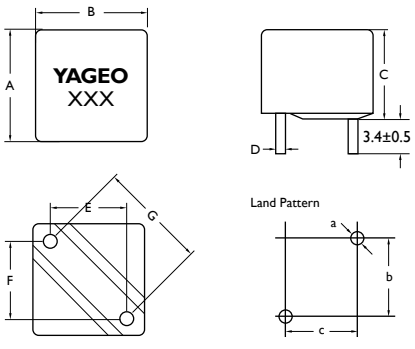
APPLICATIONS

Excellent for power lines used on DC-DC conversion applications i.e. power switching, personal computers and handheld devices.

FEATURES

- Halogen Free products
- Shielded construction
- Lowest DCR/μH, in this package size
- Handles high transient current spikes without saturation
- No air-gap inside but filled with magnetic powder

SHAPES AND DIMENSIONS



G size for 9.0 ± 0.5, customers can request the design

Unit: mm

TYPE	A	B	C . Max	D	E	F	a	b	c
MC0809	8.5 ± 0.4	8.5 ± 0.4	9.9	1.2 ± 0.25	4.7 ± 0.5	4.7 ± 0.5	1.6	5.2	5.2
MC1208	10.2 ± 0.5	12.3 ± 0.5	7.5	1.4 ± 0.25	6.7 ± 0.5	6 ± 0.5	1.8	6.5	7.2
MC1209	10.2 ± 0.5	12.3 ± 0.5	9.5	1.7 ± 0.30	6.7 ± 0.5	6 ± 0.5	2.1	6.5	7.2
MC1210	10.2 ± 0.5	12.3 ± 0.5	10	1.5 ± 0.25	6.7 ± 0.5	6 ± 0.5	1.9	6.5	7.2
MC1211	10.2 ± 0.5	12.3 ± 0.5	11	1.7 ± 0.30	6.7 ± 0.5	6 ± 0.5	2.1	6.5	7.2

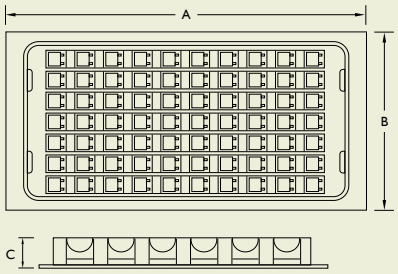
ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE	DC RESISTANCE (mΩ)		Isat	Irms
	(µH) ±20%	Typical	Max.	(A) Max.	(A) Max.
MC1208-R22M-N	0.22	0.50	0.60	56.00	36.00
MC1209-R33M-N	0.33	0.70	0.80	48.00	31.00
MC1209-R39M-N	0.39	0.70	0.80	43.00	31.00
MC1209-R47M-N	0.47	0.65	0.75	50.00	36.00
MC1209-R56M-N	0.56	0.65	0.75	50.00	36.00
MC1210-R56M-N	0.56	0.90	1.00	38.00	28.00
MC1210-R68M-N	0.68	0.90	1.00	36.00	28.00
MC1210-R80M-N	0.80	1.25	1.45	34.00	24.00
MC1210-1R0M-N	1.00	1.75	2.00	32.00	20.00
MC1210-1R2M-N	1.20	1.20	1.36	40.00	26.00
MC1210-1R5M-N	1.50	3.00	3.50	30.00	16.00
MC1210-2R2M-N	2.20	4.30	5.00	24.00	13.60
MC1210-2R8M-N	2.80	5.60	6.40	20.00	12.30
MC1210-3R3M-N	3.30	6.80	7.70	16.00	11.20
MC1210-R47M-N	0.47	0.90	1.00	40.00	28.00
MC1210-4R7M-N	4.70	8.80	10.00	15.00	10.00
MC1211-R68M-N	0.68	0.78	0.90	48.00	34.00
MC1211-R80M-N	0.80	0.86	1.00	45.00	32.00
MC1211-R90M-N	0.90	0.86	1.00	45.00	32.00

Note:
Inductance test frequency at 100 KHz
Isat: DC current at which the inductance drops 30% from its value without current
Irms: The actual current when temperature of coil becomes $\Delta T = 40\ ^{\circ}C$

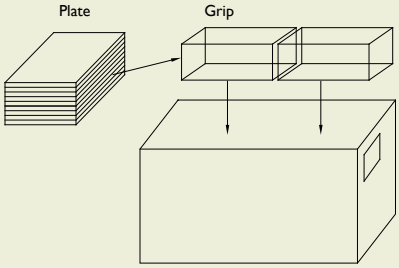
PLATE DIMENSIONS

Unit: mm



TYPE	A	B	C
MC1208	251	138	13.00
MC1209	251	138	13.00
MC1210	251	138	13.00
MC1211	251	138	13.00

PACKAGING QUANTITY



TYPE	BULK	QTY/PLATE	PLATE/GRIP	GRIP	BOX
MC1208	v	60	8	2	960
MC1209	v	60	8	2	960
MC1210	v	60	8	2	960
MC1211	v	60	8	2	960