



Chip Beads

Multilayer Chip Beads Inductors for High Current - MA Series / 大电流积层贴片磁珠

► Chip Bead Features

High current rating up to 6A.

Excellent solderability and heat resistance.

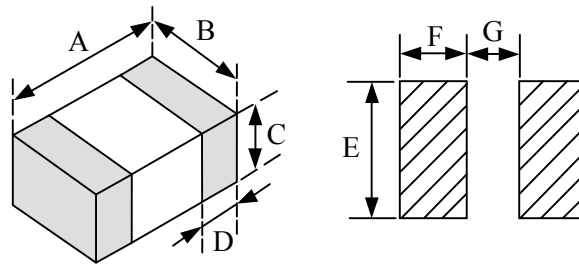
Closed magnetic circuit structure allows high density mounting while preventing crosstalk.

► Chip Bead Applications

Notebook Computer, Disc Drive Unit(CD/DVD), Inkjet Printer, Hard Disk Drive, Copying Machine, Display Monitor, Gaming Machine, Color TV, Video Tape Recorder, DVD Player, Video Camera, Digital Still Camera, Car Electronics, Lowest EMI.

► Chip Bead Configurations & Dimensions (unit: mm)

Land Pattern



Type	A	B	C	D	E	F	G
TCMA160808 (0603)	1.6 ± 0.2	0.8 ± 0.2	0.8 ± 0.2	0.3 ± 0.2	0.7	0.7	0.7
TCMA201209 (0805)	2.0 ± 0.2	1.2 ± 0.2	0.9 ± 0.2	0.5 ± 0.3	1.0	0.8	1.0
TCMA321611 (1206)	3.2 ± 0.2	1.6 ± 0.2	1.1 ± 0.2	0.5 ± 0.3	1.4	1.1	2.2
TCMA322513 (1210)	3.2 ± 0.2	2.5 ± 0.2	1.3 ± 0.2	0.5 ± 0.3	2.3	1.1	2.2
TCMA451616 (1806)	4.5 ± 0.2	1.6 ± 0.2	1.6 ± 0.2	0.5 ± 0.3	1.5	2.25	1.5
TCMA453215 (1812)	4.5 ± 0.2	3.2 ± 0.2	1.5 ± 0.2	0.5 ± 0.3	3.0	1.5	3.0

► Electrical Characteristics for TCMA Series - Chip Beads

Part Number	Impedance(Ω)	Tolerance(%)	Freq.(MHz)	DCR(Ω)(max)	IDC(A)(max)
TCMA160808 - U0030	30	25	100	0.030	3.0
TCMA160808 - U0060	60	25	100	0.040	3.0
TCMA160808 - U0120	120	25	100	0.100	2.5
TCMA160808 - U0300	300	25	100	0.150	2.0
TCMA160808 - U0600	600	25	100	0.200	1.0
TCMA201209 - B0007	7	25	100	0.030	3.0
TCMA201209 - U0011	11	25	100	0.010	6.0
TCMA201209 - U0017	17	25	100	0.025	3.0
TCMA201209 - U0022	22	25	100	0.025	3.0
TCMA201209 - U0030	30	25	100	0.025	3.0
TCMA201209 - U0120	120	25	100	0.060	3.0
TCMA201209 - U0300	300	25	100	0.100	2.0
TCMA201209 - U0600	600	25	100	0.150	2.0

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Chip Beads

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Part Number	Impedance(Ω)	Tolerance(%)	Freq.(MHz)	DCR(Ω)(max)	IDC(A)(max)
TCMA321611 - B0019	19	25	100	0.040	3.0
TCMA321611 - G0080	80	25	100	0.030	3.0
TCMA321611 - G0100	100	25	100	0.030	3.0
TCMA321611 - U0031	31	25	100	0.010	6.0
TCMA321611 - U0050	50	25	100	0.025	3.0
TCMA321611 - U0120	120	25	100	0.040	3.0
TCMA321611 - U0300	300	25	100	0.050	2.5
TCMA321611 - U0600	600	25	100	0.100	2.0
TCMA321611 - Z0026	26	25	100	0.010	6.0
TCMA322513 - U0030	30	25	100	0.050	3.0
TCMA322513 - U0052	52	25	100	0.050	3.0
TCMA322513 - U0065	65	25	100	0.030	3.0
TCMA451616 - U0060	60	25	100	0.010	6.0
TCMA451616 - U0075	75	25	100	0.025	3.0
TCMA451616 - U0080	80	25	100	0.050	3.0
TCMA453215 - U0070	70	25	100	0.030	6.0
TCMA453215 - U0120	120	25	100	0.050	3.0
TCMA453215 - Z0120	120	25	100	0.050	3.0

How to Order

TCMA160808 - U 0030
① ② ③

① Multilayer Chip Beads Inductors for High Current :
 TCMA160808, TCMA201209, TCMA321611,
 TCMA322513, TCMA451616, TCMA453215.

② Material

③ Impedance



Chip Beads

Multilayer Chip Beads Inductor - MB Series / 积层贴片磁珠

► Multilayer Chip Bead Features

Excellent solderability and heat resistance.

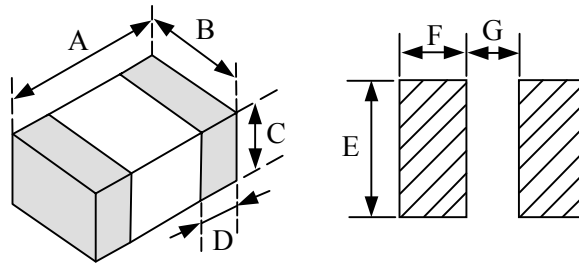
Closed magnetic circuit structure allows high density mounting while preventing crosstalk.

► Applications

Notebook Computer, Disc Drive Unit(CD/DVD), Inkjet Printer, Hard Disk Drive, Copying Machine, Display Monitor, Gaming Machine, Color TV, Video Tape Recorder, DVD Player, Video Camera, Digital Still Camera, Car Electronics, Lowest EMI.

► Multilayer Chip Bead Configurations & Dimensions (unit: mm)

Land Pattern



Type	A	B	C	D	E	F	G
TCMB100505 (0402)	1.0 ± 0.1	0.5 ± 0.1	0.5 ± 0.1	0.1 (min)	0.5	0.45	0.5
TCMB160808 (0603)	1.6 ± 0.2	0.8 ± 0.2	0.8 ± 0.2	0.3 ± 0.2	0.7	0.7	0.7
TCMB201209 (0805)	2.0 ± 0.2	1.2 ± 0.2	0.9 ± 0.2	0.5 ± 0.3	1.0	0.8	1.0
TCMB321611 (1206)	3.2 ± 0.2	1.6 ± 0.2	1.1 ± 0.2	0.5 ± 0.3	1.4	1.1	2.2
TCMB321616 (1206)	3.2 ± 0.2	1.6 ± 0.2	1.6 ± 0.2	0.5 ± 0.3	1.4	1.1	2.2
TCMB322513 (1210)	3.2 ± 0.2	2.5 ± 0.2	1.3 ± 0.2	0.5 ± 0.3	2.3	1.1	2.2
TCMB451616 (1806)	4.5 ± 0.2	1.6 ± 0.2	1.6 ± 0.2	0.5 ± 0.3	1.5	2.25	1.5
TCMB453215 (1812)	4.5 ± 0.2	3.2 ± 0.2	1.5 ± 0.2	0.5 ± 0.3	3.0	1.5	3.0

► How to Order

TCMB100505 - U 0030
① ② ③

① Multilayer Chip Beads Inductor:

TCMB100505, TCMB160808, TCMB201209, TCMB321611, TCMB321616, TCMB322513, TCMB451616, TCMB453215

② Material

③ Impedance



Chip Beads

► Electrical Characteristics for TCMB100505 Series - Multilayer Chip Beads Inductor

Part Number	Impedance(Ω)	Tolerance(%)	Freq.(MHz)	DCR(Ω)(max)	IDC(mA)(max)
TCMB100505 - B0030	30	25	100	0.40	200
TCMB100505 - B0060	60	25	100	0.50	200
TCMB100505 - B0120	120	25	100	0.70	100
TCMB100505 - B0220	220	25	100	0.90	100
TCMB100505 - B0300	300	25	100	1.00	100

TCMB100505 - G0030	30	25	100	0.30	500
TCMB100505 - G0060	60	25	100	0.40	200
TCMB100505 - G0120	120	25	100	0.50	200
TCMB100505 - G0220	220	25	100	0.70	100
TCMB100505 - G0300	300	25	100	0.80	100
TCMB100505 - G0450	450	25	100	0.90	100
TCMB100505 - G0600	600	25	100	1.00	100

TCMB100505 - U0030	30	25	100	0.30	500
TCMB100505 - U0060	60	25	100	0.40	200
TCMB100505 - U0120	120	25	100	0.50	200
TCMB100505 - U0220	220	25	100	0.70	100
TCMB100505 - U0300	300	25	100	0.80	100
TCMB100505 - U0450	450	25	100	0.90	100
TCMB100505 - U0600	600	25	100	1.00	100

TCMB100505 - Z0030	30	25	100	0.30	500
TCMB100505 - Z0060	60	25	100	0.40	200
TCMB100505 - Z0120	120	25	100	0.50	200
TCMB100505 - Z0220	220	25	100	0.70	100
TCMB100505 - Z0300	300	25	100	0.80	100
TCMB100505 - Z0450	450	25	100	0.90	100
TCMB100505 - Z0600	600	25	100	1.00	100



Chip Beads

► Electrical Characteristics for TCMB160808 Series - Multilayer Chip Beads Inductor

Part Number	Impedance(Ω)	Tolerance(%)	Freq.(MHz)	DCR(Ω)(max)	IDC(mA)(max)
TCMB160808 - B0005	5	25	100	0.20	600
TCMB160808 - B0040	40	25	100	0.30	300
TCMB160808 - B0060	60	25	100	0.30	300
TCMB160808 - B0080	80	25	100	0.30	200
TCMB160808 - B0120	120	25	100	0.30	200
TCMB160808 - B0180	180	25	100	0.35	200
TCMB160808 - B0220	220	25	100	0.40	200
TCMB160808 - B0300	300	25	100	0.45	200
TCMB160808 - B0600	600	25	100	0.65	200
TCMB160808 - B1000	1000	25	100	0.80	50
TCMB160808 - G0060	60	25	100	0.20	300
TCMB160808 - G0080	80	25	100	0.20	300
TCMB160808 - G0120	120	25	100	0.20	200
TCMB160808 - G0220	220	25	100	0.20	200
TCMB160808 - G0300	300	25	100	0.35	200
TCMB160808 - G0450	450	25	100	0.40	200
TCMB160808 - G0600	600	25	100	0.45	200
TCMB160808 - G1000	1000	25	100	0.60	100
TCMB160808 - G1500	1500	25	100	0.70	50
TCMB160808 - G2000	2000	25	100	0.80	50
TCMB160808 - L0015	15	25	100	0.30	200
TCMB160808 - L0030	30	25	100	0.30	200
TCMB160808 - L0060	60	25	100	0.30	200
TCMB160808 - L0080	80	25	100	0.40	150
TCMB160808 - L0120	120	25	100	0.40	150
TCMB160808 - L0220	220	25	100	0.45	150
TCMB160808 - L0300	300	25	100	0.60	100
TCMB160808 - U0009	9	25	100	0.20	500
TCMB160808 - U0030	30	25	100	0.20	400
TCMB160808 - U0060	60	25	100	0.20	300
TCMB160808 - U0080	80	25	100	0.20	300
TCMB160808 - U0120	120	25	100	0.20	200
TCMB160808 - U0220	220	25	100	0.20	200
TCMB160808 - U0300	300	25	100	0.35	200
TCMB160808 - U0450	450	25	100	0.40	200
TCMB160808 - U0600	600	25	100	0.45	200
TCMB160808 - U1000	1000	25	100	0.60	100
TCMB160808 - Z0060	60	25	100	0.20	300
TCMB160808 - Z0080	80	25	100	0.20	300
TCMB160808 - Z0120	120	25	100	0.20	200
TCMB160808 - Z0220	220	25	100	0.20	200
TCMB160808 - Z0300	300	25	100	0.35	200
TCMB160808 - Z0450	450	25	100	0.40	250
TCMB160808 - Z0600	600	25	100	0.45	200
TCMB160808 - Z1000	1000	25	100	0.60	100



Chip Beads

► Electrical Characteristics for TCMB201209 Series - Multilayer Chip Beads Inductor

Part Number	Impedance(Ω)	Tolerance(%)	Freq.(MHz)	DCR(Ω)(max)	IDC(mA)(max)
TCMB201209 - B0007	7	25	100	0.15	600
TCMB201209 - B0040	40	25	100	0.20	300
TCMB201209 - B0080	80	25	100	0.20	300
TCMB201209 - B0120	120	25	100	0.25	200
TCMB201209 - B0220	220	25	100	0.35	200
TCMB201209 - B0300	300	25	100	0.40	200
TCMB201209 - B0600	600	25	100	0.50	200
TCMB201209 - B1000	1000	25	100	0.60	200
TCMB201209 - G0080	80	25	100	0.15	300
TCMB201209 - G0120	120	25	100	0.25	300
TCMB201209 - G0150	150	25	100	0.25	300
TCMB201209 - G0220	220	25	100	0.30	200
TCMB201209 - G0300	300	25	100	0.30	200
TCMB201209 - G0500	500	25	100	0.30	200
TCMB201209 - G0600	600	25	100	0.35	200
TCMB201209 - G1000	1000	25	100	0.45	200
TCMB201209 - G1500	1500	25	100	0.55	200
TCMB201209 - G2000	2000	25	100	0.60	200
TCMB201209 - U0011	11	25	100	0.15	600
TCMB201209 - U0032	32	25	100	0.15	400
TCMB201209 - U0080	80	25	100	0.15	300
TCMB201209 - U0120	120	25	100	0.25	300
TCMB201209 - U0150	150	25	100	0.25	300
TCMB201209 - U0220	220	25	100	0.30	200
TCMB201209 - U0300	300	25	100	0.30	200
TCMB201209 - U0500	500	25	100	0.30	200
TCMB201209 - U0600	600	25	100	0.35	200
TCMB201209 - U1000	1000	25	100	0.45	200
TCMB201209 - Z0010	10	25	100	0.15	600
TCMB201209 - Z0080	80	25	100	0.15	300
TCMB201209 - Z0120	120	25	100	0.25	300
TCMB201209 - Z0150	150	25	100	0.25	300
TCMB201209 - Z0220	220	25	100	0.30	200
TCMB201209 - Z0300	300	25	100	0.30	200
TCMB201209 - Z0500	500	25	100	0.30	200
TCMB201209 - Z0600	600	25	100	0.35	200
TCMB201209 - Z1000	1000	25	100	0.45	200





Chip Beads

► Electrical Characteristics for TCMB321611 Series - Multilayer Chip Beads Inductor

Part Number	Impedance(Ω)	Tolerance(%)	Freq.(MHz)	DCR(Ω)(max)	IDC(mA)(max)
TCMB321611 - B0019	19	25	100	0.20	500
TCMB321611 - G0150	150	25	100	0.30	300
TCMB321611 - G0300	300	25	100	0.30	300
TCMB321611 - G0600	600	25	100	0.30	200
TCMB321611 - U0031	31	25	100	0.20	500
TCMB321611 - U0060	60	25	100	0.30	400
TCMB321611 - U0090	90	25	100	0.30	300
TCMB321611 - U0150	150	25	100	0.30	300
TCMB321611 - U0300	300	25	100	0.30	300
TCMB321611 - U0600	600	25	100	0.30	200
TCMB321611 - U1200	1200	25	50	0.50	100
TCMB321611 - U2000	2000	25	30	0.60	100
TCMB321611 - Z0026	26	25	100	0.20	500
TCMB321611 - Z0150	150	25	100	0.30	300
TCMB321611 - Z0300	300	25	100	0.30	300
TCMB321611 - Z0600	600	25	100	0.30	200
TCMB321611 - Z1200	1200	25	50	0.50	100
TCMB321611 - Z2000	2000	25	30	0.60	100

► Multilayer Chip Bead Inductor Electrical Characteristics for TCMB321616 Series

Part Number	Impedance(Ω)	Tolerance(%)	Freq.(MHz)	DCR(Ω)(max)	IDC(mA)(max)
TCMB321616 - U0060	60	25	100	0.30	400

► Multilayer Chip Bead Inductor Electrical Characteristics for TCMB322513 Series

Part Number	Impedance(Ω)	Tolerance(%)	Freq.(MHz)	DCR(Ω)(max)	IDC(mA)(max)
TCMB322513 - B0031	31	25	100	0.30	400
TCMB322513 - U0060	60	25	100	0.30	400
TCMB322513 - U0090	90	25	100	0.30	300
TCMB322513 - Z0052	52	25	100	0.30	400

► Multilayer Chip Bead Inductor Electrical Characteristics for TCMB451616 Series

Part Number	Impedance(Ω)	Tolerance(%)	Freq.(MHz)	DCR(Ω)(max)	IDC(mA)(max)
TCMB451616 - U0060	60	25	100	0.10	500
TCMB451616 - U0150	150	25	100	0.30	300
TCMB451616 - U0080	80	25	100	0.10	500
TCMB451616 - Z0150	150	25	100	0.30	300

► Multilayer Chip Bead Inductor Electrical Characteristics for TCMB453215 Series

Part Number	Impedance(Ω)	Tolerance(%)	Freq.(MHz)	DCR(Ω)(max)	IDC(mA)(max)
TCMB453215 - B0070	70	25	100	0.30	300
TCMB453215 - U0130	130	25	100	0.30	300
TCMB453215 - Z0120	120	25	100	0.30	300