

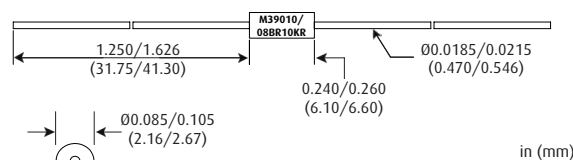
ER10M SERIES

Established Reliability

M39010 Level-R Molded Unshielded Inductor

Military Specifications:

M39010/08, M39010/09, M39010/10



in (mm)

PART NUMBER	MIL DASH NO.	L µH	IND TOL %	Q MIN	TEST FREQ MHz	SRF MHz MIN	DCR Ω MAX	CURRENT RATING mA DC
M39010/08 PHENOLIC CORE								
ER10M100J [^]	BR10J [^]	0.10	5, 10	40	25	680	0.080	1350
ER10M110J [^]	BR11J [^]	0.11	5	40	25	660	0.085	1309
ER10M120J [^]	BR12J [^]	0.12	5, 10	40	25	640	0.090	1270
ER10M130J [^]	BR13J [^]	0.13	5	38	25	625	0.095	1239
ER10M150J [^]	BR15J [^]	0.15	5, 10	38	25	600	0.100	1200
ER10M160J [^]	BR16J [^]	0.16	5	35	25	580	0.110	1151
ER10M180J [^]	BR18J [^]	0.18	5, 10	35	25	550	0.120	1105
ER10M200J [^]	BR20J [^]	0.20	5	33	25	530	0.130	1059
ER10M220J [^]	BR22J [^]	0.22	5, 10	33	25	510	0.140	1025
ER10M240J [^]	BR24J [^]	0.24	5	33	25	475	0.150	986
ER10M270J [^]	BR27J [^]	0.27	5, 10	33	25	430	0.160	960
ER10M300J [^]	BR30J [^]	0.30	5	30	25	420	0.190	876
ER10M330J [^]	BR33J [^]	0.33	5, 10	30	25	410	0.220	815
ER10M360J [^]	BR36J [^]	0.36	5	30	25	385	0.260	749
ER10M390J [^]	BR39J [^]	0.39	5, 10	30	25	365	0.300	700
ER10M430J [^]	BR43J [^]	0.43	5	30	25	345	0.325	670
ER10M470J [^]	BR47J [^]	0.47	5, 10	30	25	330	0.350	650
ER10M510J [^]	BR51J [^]	0.51	5	30	25	310	0.420	589
ER10M560J [^]	BR56J [^]	0.56	5, 10	30	25	300	0.500	545
ER10M620J [^]	BR62J [^]	0.63	5	28	25	290	0.550	515
ER10M680J [^]	BR68J [^]	0.68	5, 10	28	25	275	0.600	495
ER10M750J [^]	BR75J [^]	0.75	5	28	25	265	0.710	453
ER10M820J [^]	BR82J [^]	0.82	5, 10	28	25	250	0.850	415
ER10M910J [^]	BR91J [^]	0.91	5	25	25	240	0.925	397
ER10M101J [^]	B1R0J [^]	1.00	5, 10	25	25	230	1.00	385
M39010/09 POWDERED IRON CORE								
ER10M111J [^]	A1R1J [^]	1.10	5	25	7.9	165	0.170	607
ER10M121J [^]	A1R2J [^]	1.20	5, 10	25	7.9	150	0.180	590
ER10M131J [^]	A1R3J [^]	1.30	5	28	7.9	145	0.200	560
ER10M151J [^]	A1R5J [^]	1.50	5, 10	28	7.9	140	0.220	535
ER10M161J [^]	A1R6J [^]	1.60	5	30	7.9	135	0.250	501
ER10M181J [^]	A1R8J [^]	1.80	5, 10	30	7.9	125	0.300	455
ER10M201J [^]	A2R0J [^]	2.00	5	30	7.9	120	0.350	425
ER10M221J [^]	A2R2J [^]	2.20	5, 10	30	7.9	115	0.400	395
ER10M241J [^]	A2R4J [^]	2.40	5	37	7.9	109	0.460	380
ER10M271J [^]	A2R7J [^]	2.70	5, 10	37	7.9	100	0.550	355
ER10M301J [^]	A3R0J [^]	3.00	5	45	7.9	95	0.700	299
ER10M331J [^]	A3R3J [^]	3.30	5, 10	45	7.9	90	0.850	270
ER10M361J [^]	A3R6J [^]	3.60	5	45	7.9	85	0.925	260
ER10M391J [^]	A3R9J [^]	3.90	5, 10	45	7.9	80	1.00	250
ER10M431J [^]	A4R3J [^]	4.30	5	45	7.9	77	1.10	240
ER10M471J [^]	A4R7J [^]	4.70	5, 10	45	7.9	75	1.20	230
ER10M511J [^]	A5R1J [^]	5.10	5	50	7.9	69	1.47	216
ER10M561J [^]	A5R6J [^]	5.60	5, 10	50	7.9	65	1.80	185
ER10M621J [^]	A6R2J [^]	6.20	5	50	7.9	62	1.90	180
ER10M681J [^]	A6R8J [^]	6.80	5, 10	50	7.9	60	2.00	180
ER10M751J [^]	A7R5J [^]	7.50	5	50	7.9	57	2.35	165
ER10M821J [^]	A8R2J [^]	8.20	5, 10	55	7.9	55	2.70	155
ER10M911J [^]	A9R1J [^]	9.10	5	55	7.9	52	3.00	145
ER10M102J [^]	A100J [^]	10	5, 10	55	7.9	50	3.70	130
ER10M112J [^]	A110J [^]	11	5	45	2.5	45	2.60	156
ER10M122J [^]	A120J [^]	12	5, 10	45	2.5	40	2.70	155
ER10M132J [^]	A130J [^]	13	5	45	2.5	38	2.80	150
ER10M152J [^]	A150J [^]	15	5, 10	45	2.5	35	2.80	150
ER10M162J [^]	A160J [^]	16	5	45	2.5	33	2.90	147
ER10M182J [^]	A180J [^]	18	5, 10	50	2.5	30	3.10	145
ER10M202J [^]	A200J [^]	20	5	50	2.5	27.5	3.20	142
ER10M222J [^]	A220J [^]	22	5, 10	50	2.5	25	3.30	140
ER10M242J [^]	A240J [^]	24	5	50	2.5	23	3.40	137
ER10M272J [^]	A270J [^]	27	5, 10	50	2.5	20	3.50	135
M39010/10 FERRITE CORE								
ER10M302J [^]	A300J [^]	30	5	45	2.5	22	3.30	132
ER10M332J [^]	A330J [^]	33	5, 10	45	2.5	24	3.40	130
ER10M362J [^]	A360J [^]	36	5	45	2.5	23	3.50	127
ER10M392J [^]	A390J [^]	39	5, 10	45	2.5	22	3.60	125
ER10M432J [^]	A430J [^]	43	5	45	2.5	21	4.10	116
ER10M472J [^]	A470J [^]	47	5, 10	45	2.5	20	4.50	110
ER10M512J [^]	A510J [^]	51	5	45	2.5	19	5.70	100
ER10M562J [^]	A560J [^]	56	5, 10	45	2.5	18	5.70	110

PART NUMBER	MIL DASH NO.	L µH	IND TOL %	Q MIN	TEST FREQ MHz	SRF MHz MIN	DCR Ω MAX	CURRENT RATING mA DC
M39010/10 FERRITE CORE (continued)								
ER10M622J [^]	A620J [^]	62	5	45	2.5	15	6.7	92
ER10M682J [^]	A680J [^]	68	5, 10	50	2.5	15	6.7	92
ER10M752J [^]	A750J [^]	75	5	50	2.5	14	7.3	88
ER10M822J [^]	A820J [^]	82	5, 10	50	2.5	14	7.3	88
ER10M912J [^]	A910J [^]	91	5	50	2.5	13	8.0	84
ER10M103J [^]	A101J [^]	100	5, 10	50	2.5	13	8.0	84
ER10M113J [^]	A111J [^]	110	5	30	0.79	12	13	66
ER10M123J [^]	A121J [^]	120	5, 10	30	0.79	12	13	66
ER10M133J [^]	A131J [^]	130	5	30	0.79	11	15	61
ER10M153J [^]	A151J [^]	150	5, 10	30	0.79	11	15	61
ER10M163J [^]	A161J [^]	160	5	30	0.79	10	17	57
ER10M183J [^]	A181J [^]	180	5, 10	30	0.79	10	17	57
ER10M203J [^]	A201J [^]	200	5	30	0.79	9.0	21	52
ER10M223J [^]	A221J [^]	220	5, 10	30	0.79	9.0	21	52
ER10M243J [^]	A241J [^]	240	5	30	0.79	8.0	25	47
ER10M273J [^]	A271J [^]	270	5, 10	30	0.79	8.0	25	47
ER10M303J [^]	A301J [^]	300	5	30	0.79	7.0	28	45
ER10M333J [^]	A331J [^]	330	5, 10	30	0.79	7.0	28	45
ER10M363J [^]	A361J [^]	360	5	30	0.79	6.5	35	40
ER10M393J [^]	A391J [^]	390	5, 10	30	0.79	6.5	35	40
ER10M433J [^]	A431J [^]	430	5	30	0.79	6.0	42	36
ER10M473J [^]	A471J [^]	470	5, 10	30	0.79	6.0	42	36
ER10M513J [^]	A511J [^]	510	5	30	0.79	5.0	46	35
ER10M563J [^]	A561J [^]	560	5, 10	30	0.79	5.0	46	35
ER10M623J [^]	A621J [^]	620	5	30	0.79	4.0	60	30
ER10M683J [^]	A681J [^]	680	5, 10	30	0.79	4.0	60	30
ER10M753J [^]	A751J [^]	750	5	30	0.79	3.8	65	29
ER10M823J [^]	A821J [^]	820	5, 10	30	0.79	3.8	65	29
ER10M913J [^]	A911J [^]	910	5	30	0.79	3.4	72	28
ER10M104J [^]	A102J [^]	1000	5, 10	30	0.79	3.4	72	28

NOTES

- Operating Temperature Range:
-55°C to +125°C for Phenolic
-55°C to +105°C for Powdered Iron & Ferrite
- Temperature Class:
Class B: 125°C for Phenolic
Class A: 105°C for Powdered Iron & Ferrite
- Current Rating at a 90°C Ambient:
35°C Rise for Phenolic
15°C Rise for Powdered Iron & Ferrite
- DWV 1000 Vrms @ Sea Level
300 Vrms @ 70,000 Feet for Phenolic & Powdered Iron
200 Vrms @ 70,000 Feet for Ferrite
- Weight Max: 0.283 grams
- Marking: Laser Mark, 2 sided (see diagram above)
- Body Color: Black

PART NUMBER DERIVATION

GEC Series

Inductance: 2 signif. digits & mult.

ex: 100 = 0.10µH, 101 = 1.0µH, 102 = 10µH, 103 = 100µH

Tolerance: K = 10%, J = 5%

(Table shows lowest standard tolerance option)

Product Level: M, P, R (^ Substitute M, P or R)

Termination: SnPb (Standard)

EXAMPLE OF ORDERING BY MILITARY PART NUMBER:

ER10M100JM → M39010/08BR10JM

TAPE AND REEL SPECS:

Pieces/reel maximum:	3500
Pitch between parts:	0.200 in.
Tape width:	2.062 in.
Reel diameter:	12 in.
Class:	1