

**ER17S**

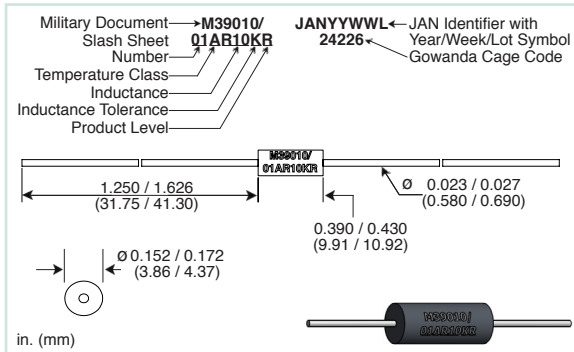


**Established Reliability**

**M39010 Level-R Molded Shielded Inductor**

**Military Specifications:**

M39010/01, M39010/02, M39010/03



PART NUMBER	MIL DASH NUMBER	L μH	IND TOL %	Q MIN	TEST FREQ MHz	SRF MHz MIN	DCR Ω MAX	CURRENT RATING mA DC
<b>M39010/01 PHENOLIC CORE / IRON SLEEVE</b>								
ER17S100J <sup>A</sup>	AR10J <sup>A</sup>	0.10	5, 10	50	25	250	0.025	1790
ER17S110J <sup>A</sup>	AR11J <sup>A</sup>	0.11	5	50	25	250	0.034	1530
ER17S120J <sup>A</sup>	AR12J <sup>A</sup>	0.12	5, 10	50	25	250	0.034	1530
ER17S130J <sup>A</sup>	AR13J <sup>A</sup>	0.13	5	50	25	250	0.037	1470
ER17S150J <sup>A</sup>	AR15J <sup>A</sup>	0.15	5, 10	50	25	250	0.037	1470
ER17S160J <sup>A</sup>	AR16J <sup>A</sup>	0.16	5	50	25	250	0.047	1300
ER17S180J <sup>A</sup>	AR18J <sup>A</sup>	0.18	5, 10	50	25	250	0.047	1300
ER17S200J <sup>A</sup>	AR20J <sup>A</sup>	0.20	5	49	25	250	0.067	1100
ER17S220J <sup>A</sup>	AR22J <sup>A</sup>	0.22	5, 10	49	25	250	0.067	1100
ER17S240J <sup>A</sup>	AR24J <sup>A</sup>	0.24	5	47	25	250	0.110	853
ER17S270J <sup>A</sup>	AR27J <sup>A</sup>	0.27	5, 10	47	25	250	0.110	853
ER17S300J <sup>A</sup>	AR30J <sup>A</sup>	0.30	5	46	25	250	0.130	780
ER17S330J <sup>A</sup>	AR33J <sup>A</sup>	0.33	5, 10	46	25	250	0.130	780
ER17S360J <sup>A</sup>	AR36J <sup>A</sup>	0.36	5	44	25	250	0.180	670
ER17S390J <sup>A</sup>	AR39J <sup>A</sup>	0.39	5, 10	44	25	250	0.180	670
ER17S430J <sup>A</sup>	AR43J <sup>A</sup>	0.43	5	44	25	235	0.250	565
ER17S470J <sup>A</sup>	AR47J <sup>A</sup>	0.47	5, 10	44	25	235	0.250	565
ER17S510J <sup>A</sup>	AR51J <sup>A</sup>	0.51	5	43	25	210	0.330	490
ER17S560J <sup>A</sup>	AR56J <sup>A</sup>	0.56	5, 10	43	25	210	0.330	490
ER17S620J <sup>A</sup>	AR62J <sup>A</sup>	0.62	5	42	25	190	0.450	420
ER17S680J <sup>A</sup>	AR68J <sup>A</sup>	0.68	5, 10	42	25	190	0.450	420
ER17S750J <sup>A</sup>	AR75J <sup>A</sup>	0.75	5	40	25	180	0.590	370
ER17S820J <sup>A</sup>	AR82J <sup>A</sup>	0.82	5, 10	40	25	180	0.590	370

<b>M39010/02 POWDERED IRON CORE / IRON SLEEVE</b>								
ER17S910J <sup>A</sup>	AR91J <sup>A</sup>	0.91	5	44	25	140	0.070	1070
ER17S101J <sup>A</sup>	A1R0J <sup>A</sup>	1.0	5, 10	44	25	140	0.070	1070
ER17S111J <sup>A</sup>	A1R1J <sup>A</sup>	1.1	5	44	7.9	130	0.100	895
ER17S121J <sup>A</sup>	A1R2J <sup>A</sup>	1.2	5, 10	44	7.9	130	0.100	895
ER17S131J <sup>A</sup>	A1R3J <sup>A</sup>	1.3	5	44	7.9	115	0.120	815
ER17S151J <sup>A</sup>	A1R5J <sup>A</sup>	1.5	5, 10	44	7.9	115	0.120	815
ER17S161J <sup>A</sup>	A1R6J <sup>A</sup>	1.6	5	44	7.9	105	0.140	755
ER17S181J <sup>A</sup>	A1R8J <sup>A</sup>	1.8	5, 10	44	7.9	105	0.140	755
ER17S201J <sup>A</sup>	A2R0J <sup>A</sup>	2.0	5	44	7.9	100	0.190	650
ER17S221J <sup>A</sup>	A2R2J <sup>A</sup>	2.2	5, 10	44	7.9	100	0.190	650
ER17S241J <sup>A</sup>	A2R4J <sup>A</sup>	2.4	5	44	7.9	92	0.280	535
ER17S271J <sup>A</sup>	A2R7J <sup>A</sup>	2.7	5, 10	44	7.9	92	0.280	535
ER17S301J <sup>A</sup>	A3R0J <sup>A</sup>	3.0	5	44	7.9	85	0.350	480
ER17S331J <sup>A</sup>	A3R3J <sup>A</sup>	3.3	5, 10	44	7.9	85	0.350	480
ER17S361J <sup>A</sup>	A3R6J <sup>A</sup>	3.6	5	44	7.9	75	0.400	450
ER17S391J <sup>A</sup>	A3R9J <sup>A</sup>	3.9	5, 10	44	7.9	75	0.400	450
ER17S431J <sup>A</sup>	A4R3J <sup>A</sup>	4.3	5	44	7.9	70	0.550	380
ER17S471J <sup>A</sup>	A4R7J <sup>A</sup>	4.7	5, 10	44	7.9	70	0.550	380
ER17S511J <sup>A</sup>	A5R1J <sup>A</sup>	5.1	5	44	7.9	65	0.720	335
ER17S561J <sup>A</sup>	A5R6J <sup>A</sup>	5.6	5, 10	44	7.9	65	0.720	335
ER17S621J <sup>A</sup>	A6R2J <sup>A</sup>	6.2	5	44	7.9	55	1.02	280
ER17S681J <sup>A</sup>	A6R8J <sup>A</sup>	6.8	5, 10	50	7.9	55	1.02	280
ER17S751J <sup>A</sup>	A7R5J <sup>A</sup>	7.5	5	50	7.9	50	1.32	245
ER17S821J <sup>A</sup>	A8R2J <sup>A</sup>	8.2	5, 10	50	7.9	50	1.32	245
ER17S911J <sup>A</sup>	A9R1J <sup>A</sup>	9.1	5	50	7.9	46	1.62	220
ER17S102J <sup>A</sup>	A100J <sup>A</sup>	10	5, 10	50	7.9	46	1.62	220
ER17S112J <sup>A</sup>	A110J <sup>A</sup>	11	5	50	2.5	44	2.00	200
ER17S122J <sup>A</sup>	A120J <sup>A</sup>	12	5, 10	50	2.5	44	2.00	200

<b>M39010/03 FERRITE CORE / FERRITE SLEEVE</b>								
ER17S152J <sup>A</sup>	A150J <sup>A</sup>	15	5, 10	45	2.5	49	0.800	315
ER17S162J <sup>A</sup>	A160J <sup>A</sup>	16	5	45	2.5	45	0.890	300
ER17S182J <sup>A</sup>	A180J <sup>A</sup>	18	5, 10	45	2.5	45	0.890	300
ER17S202J <sup>A</sup>	A200J <sup>A</sup>	20	5	45	2.5	41	0.960	290
ER17S222J <sup>A</sup>	A220J <sup>A</sup>	22	5, 10	45	2.5	41	0.960	290
ER17S242J <sup>A</sup>	A240J <sup>A</sup>	24	5	45	2.5	38	1.19	260
ER17S272J <sup>A</sup>	A270J <sup>A</sup>	27	5, 10	45	2.5	38	1.19	260
ER17S302J <sup>A</sup>	A300J <sup>A</sup>	30	5	45	2.5	34	1.37	240
ER17S332J <sup>A</sup>	A330J <sup>A</sup>	33	5, 10	45	2.5	34	1.37	240
ER17S362J <sup>A</sup>	A360J <sup>A</sup>	36	5	45	2.5	29	1.93	205
ER17S392J <sup>A</sup>	A390J <sup>A</sup>	39	5, 10	50	2.5	29	1.93	205
ER17S432J <sup>A</sup>	A430J <sup>A</sup>	43	5	50	2.5	27	2.11	195
ER17S472J <sup>A</sup>	A470J <sup>A</sup>	47	5, 10	50	2.5	27	2.11	195

**NOTES:**

- **Operating Temperature Range:** -55°C to +105°C
- **Temperature Class:** Class A (105°C)
- **Current Rating** is based on a 15°C temperature rise at an ambient temperature of 90°C
- **DWV** 1000 Vrms @ Sea Level  
200 Vrms @ 70,000 Feet
- **Weight:**  
Phenolic: 0.85 grams  
Iron & Ferrite: 1.13 grams
- **Marking:** Laser Mark, 2 sided (see diagram above)
- Body color is black
- Magnetic Shielding: 3% Max Coupling
- When ordering, specify **Tolerance and Product Level:**

ER17S100JM

**Tolerance:** K = 10%, J = 5%  
(Table shows available standard tolerance options)

**Product Level:** M, P, R  
^ Substitute M, P or R

- When ordering by military part number, specify **Military Spec, Dash No., Tolerance & Product Level:**

M39010/01AR10JM

Example of ordering by Military Part Number:  
ER17S100JM → M39010/01AR10JM

**TAPE AND REEL SPECS:**

Pcs./Reel maximum:	2500
Pitch between parts:	0.200 in.
Tape width:	2.062 in.
Reel diameter:	12 in.
Class:	1

## ER17S



**Established Reliability**

*M39010 Molded Shielded Inductor*

**Military Specifications:**

M39010/01, M39010/02, M39010/03

PART NUMBER	MIL DASH NUMBER	L $\mu$ H	IND TOL %	Q MIN	TEST FREQ MHz	SRF MHz MIN	DCR $\Omega$ MAX	CURRENT RATING mA DC
<b>M39010/03 FERRITE CORE / FERRITE SLEEVE</b>								
ER17S512J <sup>A</sup>	A510J <sup>A</sup>	51	5	50	2.5	25	2.23	190
ER17S562J <sup>A</sup>	A560J <sup>A</sup>	56	5, 10	50	2.5	25	2.23	190
ER17S622J <sup>A</sup>	A620J <sup>A</sup>	62	5	50	2.5	21	2.44	180
ER17S682J <sup>A</sup>	A680J <sup>A</sup>	68	5, 10	50	2.5	21	2.44	180
ER17S752J <sup>A</sup>	A750J <sup>A</sup>	75	5	50	2.5	10.5	2.70	170
ER17S822J <sup>A</sup>	A820J <sup>A</sup>	82	5, 10	50	2.5	10.5	2.70	170
ER17S912J <sup>A</sup>	A910J <sup>A</sup>	91	5	50	2.5	10.0	3.12	160
ER17S103J <sup>A</sup>	A101J <sup>A</sup>	100	5, 10	50	2.5	10.0	3.12	160
ER17S113J <sup>A</sup>	A111J <sup>A</sup>	110	5	50	0.79	9.7	3.60	150
ER17S123J <sup>A</sup>	A121J <sup>A</sup>	120	5, 10	55	0.79	9.7	3.60	150
ER17S133J <sup>A</sup>	A131J <sup>A</sup>	130	5	55	0.79	8.5	4.10	140
ER17S153J <sup>A</sup>	A151J <sup>A</sup>	150	5, 10	55	0.79	8.5	4.10	140
ER17S163J <sup>A</sup>	A161J <sup>A</sup>	160	5	55	0.79	8.0	4.40	135
ER17S183J <sup>A</sup>	A181J <sup>A</sup>	180	5, 10	55	0.79	8.0	4.40	135
ER17S203J <sup>A</sup>	A201J <sup>A</sup>	200	5	55	0.79	7.5	5.00	125
ER17S223J <sup>A</sup>	A221J <sup>A</sup>	220	5, 10	55	0.79	7.5	5.00	125
ER17S243J <sup>A</sup>	A241J <sup>A</sup>	240	5	55	0.79	7.0	5.80	115
ER17S273J <sup>A</sup>	A271J <sup>A</sup>	270	5, 10	55	0.79	7.0	5.80	115
ER17S303J <sup>A</sup>	A301J <sup>A</sup>	300	5	55	0.79	6.5	6.40	110
ER17S333J <sup>A</sup>	A331J <sup>A</sup>	330	5, 10	55	0.79	6.5	6.40	110
ER17S363J <sup>A</sup>	A361J <sup>A</sup>	360	5	55	0.79	6.2	7.40	105
ER17S393J <sup>A</sup>	A391J <sup>A</sup>	390	5, 10	60	0.79	6.2	7.40	105
ER17S433J <sup>A</sup>	A431J <sup>A</sup>	430	5	60	0.79	5.7	9.50	92
ER17S473J <sup>A</sup>	A471J <sup>A</sup>	470	5, 10	60	0.79	5.7	9.50	92
ER17S513J <sup>A</sup>	A511J <sup>A</sup>	510	5	60	0.79	4.7	10.5	90
ER17S563J <sup>A</sup>	A561J <sup>A</sup>	560	5, 10	60	0.79	4.7	10.5	90
ER17S623J <sup>A</sup>	A621J <sup>A</sup>	620	5	60	0.79	4.5	11.8	80
ER17S683J <sup>A</sup>	A681J <sup>A</sup>	680	5, 10	60	0.79	4.5	11.8	80
ER17S753J <sup>A</sup>	A751J <sup>A</sup>	750	5	60	0.79	4.2	13.0	80
ER17S823J <sup>A</sup>	A821J <sup>A</sup>	820	5, 10	60	0.79	4.2	13.0	80
ER17S913J <sup>A</sup>	A911J <sup>A</sup>	910	5	60	0.79	3.8	17.5	70
ER17S104J <sup>A</sup>	A102J <sup>A</sup>	1000	5, 10	60	0.79	3.8	17.5	70