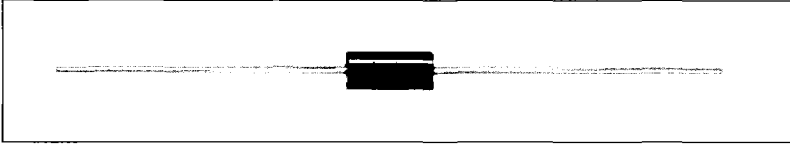


# MODEL IMS-5A-ER and IMS-5B-ER Inductors

Military/Established Reliability, MIL-C-39010 Qualified  
M39010/01/02, Magnetic Shield



### FEATURES

- MIL-C-39010/01 (phenolic core - iron sleeve)
- MIL-C-39010/02 (iron core - iron sleeve)

### ELECTRICAL SPECIFICATIONS

**Inductance Tolerance:**  $\pm 10\%$ ,  $\pm 5\%$ .  
**Dielectric Strength:** 1000 V RMS at sea level.  
**Operating Temperature Range:**  $-55^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$ .  
**Self-Resonant Frequency:** Measured per MIL-C-39010.  
**Q:** Measured on a Q-Meter.

**Maximum Current:** Based on temperature rise not to exceed  $15^{\circ}\text{C}$  at  $+90^{\circ}\text{C}$  ambient.

### MECHANICAL SPECIFICATIONS

**Terminal Strength:** Meets 5 pounds pull test; three  $360^{\circ}\text{C}$  rotations in alternate directions.

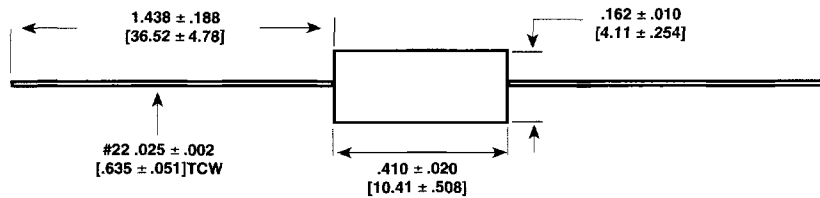
### DENSITY SPECIFICATIONS

**Weight:** 1 gram maximum  
**Shielding:** At the coupling test frequency two units assembled side by side exhibit less than 3% coupling.

### ENVIRONMENTAL SPECIFICATIONS

**Moisture:** Meets requirements of MIL-C-39010  
**Vibration:** High frequency, 10Hz to 2000 Hz @ 20G  $\pm 10\%$  maximum for 12 logarithmic swings each of 20 minute duration repeated for each of three mutually perpendicular planes.  
**Shock:** 100G, 6 MS

### DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]



### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	MIL-C-39010 TYPE	DASH † NUMBER	IND. ( $\mu\text{H}$ )	TOL.	Q MIN.	TEST FREQ. (MHz)	SELF-RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	RATED DC ** CURRENT (mA)	INCREMENTAL CURRENT (mA)
IMS-5A-ER	M39010/01	AR10**	.10	$\pm 5\%$ , $\pm 10\%$	50	25	250	.025	1790	-
IMS-5A-ER	M39010/01	AR11**	.11	$\pm 5\%$	50	25	250	.034	1530	-
IMS-5A-ER	M39010/01	AR12**	.12	$\pm 5\%$ , $\pm 10\%$	50	25	250	.034	1530	-
IMS-5A-ER	M39010/01	AR13**	.13	$\pm 5\%$	50	25	250	.037	1470	-
IMS-5A-ER	M39010/01	AR15**	.15	$\pm 5\%$ , $\pm 10\%$	50	25	250	.037	1470	-
IMS-5A-ER	M39010/01	AR16**	.16	$\pm 5\%$	50	25	250	.047	1300	-
IMS-5A-ER	M39010/01	AR18**	.18	$\pm 5\%$ , $\pm 10\%$	50	25	250	.047	1300	-
IMS-5A-ER	M39010/01	AR20**	.20	$\pm 5\%$	49	25	250	.067	1100	-
IMS-5A-ER	M39010/01	AR22**	.22	$\pm 5\%$ , $\pm 10\%$	49	25	250	.067	1100	-
IMS-5A-ER	M39010/01	AR24**	.24	$\pm 5\%$	47	25	250	.110	853	-
IMS-5A-ER	M39010/01	AR27**	.27	$\pm 5\%$ , $\pm 10\%$	47	25	250	.110	853	-
IMS-5A-ER	M39010/01	AR30**	.30	$\pm 5\%$	46	25	250	.130	780	-

† The complete Dash Number will include two additional letters (indicated by \*\*). The first additional letter will indicate the inductance tolerance and the second additional letter will indicate the failure rate symbol (e.g. M, P, R, S) and will be added to the end of the Dash Number.

**NOTE:** Listing of Military Standard does not imply qualification. Contact factory for latest government QPL information.

**MODEL IMS-5A-ER AND IMS-5B-ER**

<b>STANDARD ELECTRICAL SPECIFICATIONS</b>										
MODEL	MIL-C-39010 TYPE	DASH † NUMBER	IND. (µH)	TOL.	Q MIN.	TEST FREQ. (MHz)	SELF-RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	RATED DC ** CURRENT (mA)	INCREMENTAL CURRENT (mA)
IMS-5A-ER	M39010/01	AR33**	.33	± 5%, ± 10%	46	25	250	.13	780	-
IMS-5A-ER	M39010/01	AR36**	.36	± 5%	44	25	250	.18	670	-
IMS-5A-ER	M39010/01	AR39**	.39	± 5%, ± 10%	44	25	250	.18	670	-
IMS-5A-ER	M39010/01	AR43**	.43	± 5%	44	25	235	.25	565	-
IMS-5A-ER	M39010/01	AR47**	.47	± 5%, ± 10%	44	25	235	.25	565	-
IMS-5A-ER	M39010/01	AR51**	.51	± 5%	43	25	210	.33	490	-
IMS-5A-ER	M39010/01	AR56**	.56	± 5%, ± 10%	43	25	210	.33	490	-
IMS-5A-ER	M39010/01	AR62**	.62	± 5%	42	25	190	.45	420	-
IMS-5A-ER	M39010/01	AR68**	.68	± 5%, ± 10%	42	25	190	.45	420	-
IMS-5A-ER	M39010/01	AR75**	.75	± 5%	40	25	180	.59	370	-
IMS-5A-ER	M39010/01	AR82**	.82	± 5%, ± 10%	40	25	180	.59	370	-
IMS-5B-ER	M39010/02	AR91**	.91	± 5%	44	25	140	.07	1070	-
IMS-5B-ER	M39010/02	A1R0**	1.00	± 5%, ± 10%	44	25	140	.07	1070	-
IMS-5B-ER	M39010/02	A1R1**	1.10	± 5%	44	7.9	130	.10	895	-
IMS-5B-ER	M39010/02	A1R2**	1.20	± 5%, ± 10%	44	7.9	130	.10	895	-
IMS-5B-ER	M39010/02	A1R3**	1.30	± 5%	44	7.9	115	.12	815	-
IMS-5B-ER	M39010/02	A1R5**	1.50	± 5%, ± 10%	44	7.9	115	.12	815	-
IMS-5B-ER	M39010/02	A1R6**	1.60	± 5%	44	7.9	105	.14	755	-
IMS-5B-ER	M39010/02	A1R8**	1.80	± 5%, ± 10%	44	7.9	105	.14	755	-
IMS-5B-ER	M39010/02	A2R0**	2.00	± 5%	44	7.9	100	.19	650	-
IMS-5B-ER	M39010/02	A2R2**	2.20	± 5%, ± 10%	44	7.9	100	.19	650	-
IMS-5B-ER	M39010/02	A2R4**	2.40	± 5%	44	7.9	92	.28	535	-
IMS-5B-ER	M39010/02	A2R7**	2.70	± 5%, ± 10%	44	7.9	92	.28	535	-
IMS-5B-ER	M39010/02	A3R0**	3.00	± 5%	44	7.9	85	.35	480	-
IMS-5B-ER	M39010/02	A3R3**	3.30	± 5%, ± 10%	44	7.9	85	.35	480	-
IMS-5B-ER	M39010/02	A4R3**	3.60	± 5%	44	7.9	75	.40	450	-
IMS-5B-ER	M39010/02	A3R9**	3.90	± 5%, ± 10%	44	7.9	75	.40	450	-
IMS-5B-ER	M39010/02	A4R3**	4.30	± 5%	44	7.9	70	.55	380	-
IMS-5B-ER	M39010/02	A4R7**	4.70	± 5%, ± 10%	44	7.9	70	.55	380	-
IMS-5B-ER	M39010/02	A5R1**	5.10	± 5%	44	7.9	65	.72	335	-
IMS-5B-ER	M39010/02	A5R6**	5.60	± 5%, ± 10%	44	7.9	65	.72	335	-
IMS-5B-ER	M39010/02	A6R2**	6.20	± 5%	44	7.9	55	1.02	280	-
IMS-5B-ER	M39010/02	A6R8**	6.80	± 5%, ± 10%	50	7.9	55	1.02	280	-
IMS-5B-ER	M39010/02	A7R5**	7.50	± 5%	50	7.9	50	1.32	245	-
IMS-5B-ER	M39010/02	A8R2**	8.20	± 5%, ± 10%	50	7.9	50	1.32	245	-
IMS-5B-ER	M39010/02	A9R1**	9.10	± 5%	50	7.9	46	1.62	220	-
IMS-5B-ER	M39010/02	A100**	10	± 5%, ± 10%	50	7.9	46	1.62	220	-
IMS-5B-ER	M39010/02	A110**	11	± 5%	50	2.5	44	2.00	200	-
IMS-5B-ER	M39010/02	A120**	12	± 5%, ± 10%	50	2.5	44	2.00	200	-

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<b>PART MARKING</b>
- Military part number
- Manufacturer's source code
- "JAN" marking date code and lot symbol

<b>HOW TO ORDER - MILITARY PART NUMBER</b>							
<u>M39010</u>	/	<u>01</u>	-	<u>A</u>	<u>R10</u>	<u>K</u>	<u>R</u>
MIL SPEC. NO. INDICATING MIL-C-39010		MIL. SPEC. SHEET NO.		TEMPERATURE CLASS	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	FAILURE RATE LEVEL