



Established Reliability Inductors

Physical Parameters and Environmental Characteristics	ER1641			ER1840		ER1537		ER1025		
	MIL-PRF-39010/01	MIL-PRF-39010/02	MIL-PRF-39010/03	MIL-PRF-39010/04	MIL-PRF-39010/05	MIL-PRF-39010/06	MIL-PRF-39010/07	MIL-PRF-39010/08	MIL-PRF-39010/09	MIL-PRF-39010/10
Inductance Range, μH	0.10 to 0.82	0.91 to 12.0	15 to 1000	0.15 to 2.7	3.0 to 27.0	0.15 to 4.7	5.1 to 240.0	0.10 to 1.00	1.1 to 27.0	30 to 1000
Core Material	Phenolic	Iron	Ferrite	Phenolic	Iron	Phenolic	Iron	Phenolic	Iron	Ferrite
Sleeve	Iron	Iron	Ferrite	—	—	—	—	—	—	—
Length, Inches	0.410 ± 0.020	0.410 ± 0.020	0.410 ± 0.020	0.437 ± 0.01	0.437 ± 0.01	0.375 ± 0.010	0.375 ± 0.010	0.250 ± 0.010	0.250 ± 0.010	0.250 ± 0.010
Millimeters	10.41 ± 0.51	10.41 ± 0.51	10.41 ± 0.51	11.10 ± 0.25	11.10 ± 0.25	9.53 ± 0.25	9.53 ± 0.25	6.35 ± 0.25	6.35 ± 0.25	6.35 ± 0.25
Diameter, Inches	0.162 ± 0.010	0.162 ± 0.010	0.162 ± 0.010	0.187 ± 0.010	0.187 ± 0.010	0.156 ± 0.010	0.156 ± 0.010	0.095 ± 0.010	0.095 ± 0.010	0.095 ± 0.010
Millimeters	4.11 ± 0.25	4.11 ± 0.25	4.11 ± 0.25	4.75 ± 0.25	4.75 ± 0.25	3.96 ± 0.25	3.96 ± 0.25	2.41 ± 0.25	2.41 ± 0.25	2.41 ± 0.25
Lead Size — AWG #	#22 TCW	#22 TCW	#22 TCW	#22 TCW	#22 TCW	#22 TCW	#22 TCW	#24 TCW	#24 TCW	#24 TCW
Inches	0.025 ± 0.002	0.025 ± 0.002	0.025 ± 0.002	0.025 ± 0.002	0.025 ± 0.002	0.025 ± 0.002	0.025 ± 0.002	0.020 ± 0.0015	0.020 ± 0.0015	0.020 ± 0.0015
Millimeters	0.635 ± 0.051	0.635 ± 0.051	0.635 ± 0.051	0.635 ± 0.051	0.635 ± 0.051	0.635 ± 0.051	0.635 ± 0.051	0.51 ± 0.04	0.51 ± 0.04	0.51 ± 0.04
Lead Length, Inches	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188	1.438 ± 0.188
Millimeters	36.53 ± 4.77	36.53 ± 4.77	36.53 ± 4.77	36.58 ± 3.05	36.58 ± 3.05	36.53 ± 4.77	36.53 ± 4.77	36.53 ± 4.77	36.53 ± 4.77	36.53 ± 4.77
Weight Max. (Grams)	0.85	1.0	1.0	0.95	0.95	0.9	0.9	0.3	0.3	0.3
Current Rating at 90°C, Max. Rise °C	15	15	15	35	15	35	15	35	15	15
Operating Temp. °C	-55 to +105	-55 to +105	-55 to +105	-55 to +125	-55 to +105	-55 to +125	-55 to +105	-55 to +125	-55 to +105	-55 to +105
Max. Power Dissipation at 90°C, Watts	0.11	0.11	0.11	0.385	0.385	0.312	0.134	0.21	0.09	0.073
Coupling	3% Max.	3% Max.	3% Max.	—	—	—	—	—	—	—
Body Color	Black	Black	Black	Tan	Tan	Tan	Tan	Tan	Tan	Tan

MARKING EXAMPLE & ORDERING INFORMATION

M	39010/08	B	1R0	K	S
Military designator	Document sheet number	Class	Inductance	Inductance Tolerance	Failure rate level

CLASS: Identifies the maximum operating temperature:
 Class A = 105°C Max.
 Class B = 125°C Max.

HOW TO ORDER:
 The Military Part Number consists of the document number and an assigned dash number as shown in the example.

MIL-PRF-39010 Molded RF Coils with Sn10 high-temperature solder for internal connections.

Approved Through Failure Rate Level S

Note The complete Military dash numbers will include two additional letters, indicated in the tables on the following three pages by **. The first additional letter will indicate tolerance: J indicates $\pm 5\%$; K indicates $\pm 10\%$; L indicates $\pm 20\%$.

The second letter will indicate the failure rate (e.g., M, P, R, S).

Packaging Tape & reel

ER1025: 12" reel, 3500 pieces max.; 14" reel, 6000 pieces max.
 ER1537 and ER1641: 12" reel, 2500 pieces max.; 14" reel, 4000 pieces max.
 ER1840: 12" reel, 2500 pieces max.; 14" reel, 3000 pieces max. For additional packaging options, see technical section.

Made in the U.S.A.

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ER SERIES (continued)

DELEVAN PART NUMBER, DASH NUMBER, MILITARY, INDUCTANCE (µH), IND. TOLERANCE (%), TEST FREQUENCY (MHz), Q MINIMUM, SRF MINIMUM (MHz), MAXIMUM (OHMS), DC RESISTANCE (OHMS @ 25°C), CURRENT, RATED DC

DELEVAN PART NUMBER, DASH NUMBER, MILITARY, INDUCTANCE (µH), IND. TOLERANCE (%), TEST FREQUENCY (MHz), Q MINIMUM, SRF MINIMUM (MHz), MAXIMUM (OHMS), DC RESISTANCE (OHMS @ 25°C), CURRENT, RATED DC

MIL-PRF-39010/01

Table with 10 columns: Part Number, Dash, Military, Inductance (µH), Ind. Tolerance (%), Test Frequency (MHz), Q Minimum, SRF Minimum (MHz), Max OHMs, DC Resistance (OHMS @ 25°C), Current, Rated DC. Rows include ER1641-101** through ER1641-821**.

MIL-PRF-39010/02

Table with 10 columns: Part Number, Dash, Military, Inductance (µH), Ind. Tolerance (%), Test Frequency (MHz), Q Minimum, SRF Minimum (MHz), Max OHMs, DC Resistance (OHMS @ 25°C), Current, Rated DC. Rows include ER1641-911** through ER1641-123**.

MIL-PRF-39010/03

Table with 10 columns: Part Number, Dash, Military, Inductance (µH), Ind. Tolerance (%), Test Frequency (MHz), Q Minimum, SRF Minimum (MHz), Max OHMs, DC Resistance (OHMS @ 25°C), Current, Rated DC. Rows include ER1641-153** through ER1641-563**.

MIL-PRF-39010/03 (continued)

Table with 10 columns: Part Number, Dash, Military, Inductance (µH), Ind. Tolerance (%), Test Frequency (MHz), Q Minimum, SRF Minimum (MHz), Max OHMs, DC Resistance (OHMS @ 25°C), Current, Rated DC. Rows include ER1641-623** through ER1641-105**.

MIL-PRF-39010/04

Table with 10 columns: Part Number, Dash, Military, Inductance (µH), Ind. Tolerance (%), Test Frequency (MHz), Q Minimum, SRF Minimum (MHz), Max OHMs, DC Resistance (OHMS @ 25°C), Current, Rated DC. Rows include ER1840-00** through ER1840-16**.

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ER SERIES (continued)

DELEVAN PART NUMBER
 DASH NUMBER
 MILITARY
 INDUCTANCE (µH)
 IND. TOLERANCE (%)
 Q MINIMUM
 TEST FREQUENCY (MHz)
 SRF MINIMUM (MHz)
 MAXIMUM (OHMS @ 25°C)
 DC RESISTANCE (OHMS @ 25°C)
 CURRENT (mA)
 RATED DC

DELEVAN PART NUMBER
 DASH NUMBER
 MILITARY
 INDUCTANCE (µH)
 IND. TOLERANCE (%)
 Q MINIMUM
 TEST FREQUENCY (MHz)
 SRF MINIMUM (MHz)
 MAXIMUM (OHMS @ 25°C)
 DC RESISTANCE (OHMS @ 25°C)
 CURRENT (mA)
 RATED DC

MIL-PRF-39010/09								
ER1025-21**	A1R1**	1.1	5	25	7.9	150	0.18	590
ER1025-22**	A1R2**	1.2	5,10	25	7.9	150	0.18	590
ER1025-23**	A1R3**	1.3	5	25	7.9	140	0.22	535
ER1025-24**	A1R5**	1.5	5,10	28	7.9	140	0.22	535
ER1025-25**	A1R6**	1.6	5	28	7.9	125	0.30	455
ER1025-26**	A1R8**	1.8	5,10	30	7.9	125	0.30	455
ER1025-27**	A2R0**	2.0	5	30	7.9	115	0.40	395
ER1025-28**	A2R2**	2.2	5,10	30	7.9	115	0.40	395
ER1025-29**	A2R4**	2.4	5	30	7.9	100	0.55	335
ER1025-30**	A2R7**	2.7	5,10	37	7.9	100	0.55	335
ER1025-31**	A3R0**	3.0	5	37	7.9	90	0.85	270
ER1025-32**	A3R3**	3.3	5,10	45	7.9	90	0.85	270
ER1025-33**	A3R6**	3.6	5	45	7.9	80	1.00	250
ER1025-34**	A3R9**	3.9	5,10	45	7.9	80	1.00	250
ER1025-35**	A4R3**	4.3	5	45	7.9	75	1.20	230
ER1025-36**	A4R7**	4.7	5,10	45	7.9	75	1.20	230
ER1025-37**	A5R1**	5.1	5	45	7.9	65	1.80	185
ER1025-38**	A5R6**	5.6	5,10	50	7.9	65	1.80	185
ER1025-39**	A6R2**	6.2	5	50	7.9	60	2.00	175
ER1025-40**	A6R8**	6.8	5,10	50	7.9	60	2.00	175
ER1025-41**	A7R5**	7.5	5	50	7.9	55	2.70	155
ER1025-42**	A8R2**	8.2	5,10	55	7.9	55	2.70	155
ER1025-43**	A9R1**	9.1	5	55	7.9	50	3.70	130
ER1025-44**	A100**	10.0	5,10	55	7.9	50	3.70	130
ER1025-45**	A110**	11.0	5	45	2.5	40	2.70	130
ER1025-46**	A120**	12.0	5,10	45	2.5	40	2.70	155
ER1025-47**	A130**	13.0	5	40	2.5	35	2.80	150
ER1025-48**	A150**	15.0	5,10	40	2.5	35	2.80	150
ER1025-49**	A160**	16.0	5	40	2.5	30	3.10	145
ER1025-50**	A180**	18.0	5,10	50	2.5	30	3.10	145
ER1025-51**	A200**	20.0	5	50	2.5	25	3.30	140
ER1025-52**	A220**	22.0	5,10	50	2.5	25	3.30	140
ER1025-53**	A240**	24.0	5	50	2.5	20	3.50	135
ER1025-54**	A270**	27.0	5,10	50	2.5	20	3.50	135

MIL-PRF-39010/10								
ER1025-55**	A300**	30.0	5	45	2.50	24	3.4	130
ER1025-56**	A330**	33.0	5,10	45	2.50	24	3.4	130
ER1025-57**	A360**	36.0	5	45	2.50	22	3.6	125
ER1025-58**	A390**	39.0	5,10	45	2.50	22	3.6	125
ER1025-59**	A430**	43.0	5	45	2.50	20	4.5	110
ER1025-60**	A470**	47.0	5,10	45	2.50	20	4.5	110
ER1025-61**	A510**	51.0	5	45	2.50	18	5.7	100
ER1025-62**	A560**	56.0	5,10	45	2.50	18	5.7	100
ER1025-63**	A620**	62.0	5	45	2.50	15	6.7	92
ER1025-64**	A680**	68.0	5,10	50	2.50	15	6.7	92
ER1025-65**	A750**	75.0	5	50	2.50	14	7.3	88
ER1025-66**	A820**	82.0	5,10	50	2.50	14	7.3	88
ER1025-67**	A910**	91.0	5	50	2.50	13	8.0	84
ER1025-68**	A101**	100	5,10	50	2.50	13	8.0	84
ER1025-69**	A111**	110	5	30	0.79	12	13.0	66
ER1025-70**	A121**	120	5,10	30	0.79	12	13.0	66
ER1025-71**	A131**	130	5	30	0.79	11	15.0	61
ER1025-72**	A151**	150	5,10	30	0.79	11	15.0	61
ER1025-73**	A161**	160	5	30	0.79	10	17.0	57
ER1025-74**	A181**	180	5,10	30	0.79	10	17.0	57
ER1025-75**	A201**	200	5	30	0.79	9.0	21.0	52
ER1025-76**	A221**	220	5,10	30	0.79	9.0	21.0	52
ER1025-77**	A241**	240	5	30	0.79	8.0	25.0	47
ER1025-78**	A271**	270	5,10	30	0.79	8.0	25.0	47
ER1025-79**	A301**	300	5	30	0.79	7.0	28.0	45
ER1025-80**	A331**	330	5,10	30	0.79	7.0	28.0	45
ER1025-81**	A361**	360	5	30	0.79	6.5	35.0	40
ER1025-82**	A391**	390	5,10	30	0.79	6.5	35.0	40
ER1025-83**	A431**	430	5	30	0.79	6.0	42.0	36
ER1025-84**	A471**	470	5,10	30	0.79	6.0	42.0	36
ER1025-85**	A511**	510	5	30	0.79	5.0	46.0	35
ER1025-86**	A561**	560	5,10	30	0.79	5.0	46.0	35
ER1025-87**	A621**	620	5	30	0.79	4.0	60.0	30
ER1025-88**	A681**	680	5,10	30	0.79	4.0	60.0	30
ER1025-89**	A751**	750	5	30	0.79	3.8	65.0	29
ER1025-90**	A821**	820	5,10	30	0.79	3.8	65.0	29
ER1025-91**	A911**	910	5	30	0.79	3.4	72.0	28
ER1025-92**	A102**	1,000	5,10	30	0.79	3.4	72.0	28

