

Low Profile Power Inductors / ENR Series

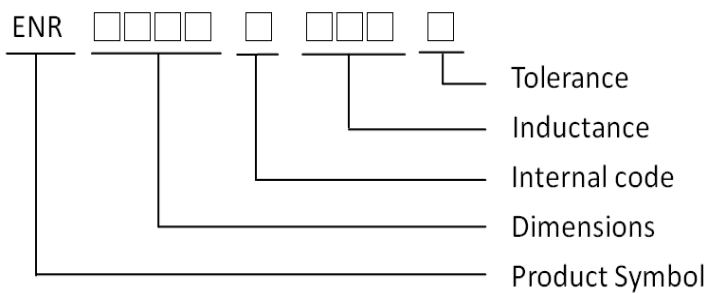
Feature:

1. Motherboards for laptop and desktop computers.
2. DC/DC Converter in distributed power systems or VRM applications.
3. Inductor for general purpose use.

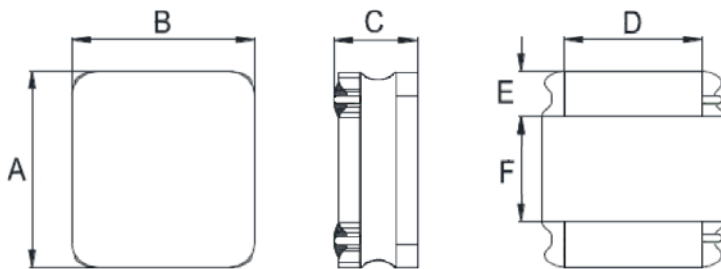
Applications:

1. DC to DC converters.
2. Power line filtering.
3. DVC/DSC/PDA, LCD display.

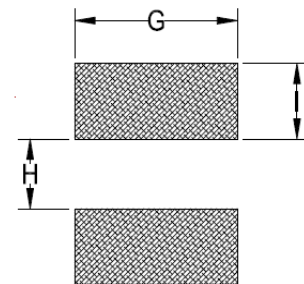
Product Identification



Shape and Dimension



Recommended PCB Pattern

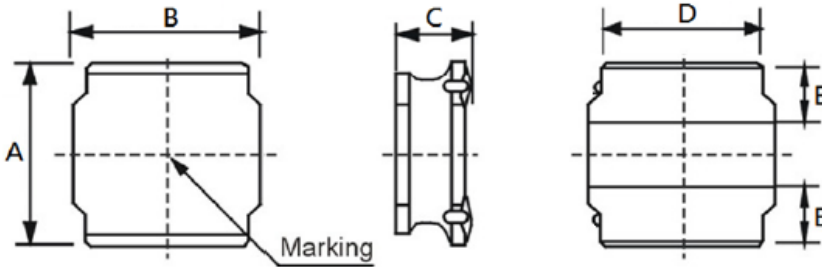


Dimensions in mm

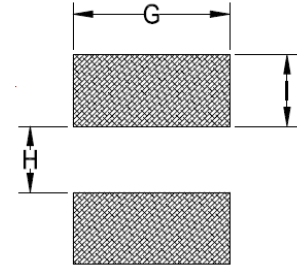
TYPE	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)
ENR201610F	2.0±0.20	1.6±0.20	1.08 Max.	0.6±0.20	0.6±0.20	2.0±0.20	1.6 Ref	0.8 Ref	0.80 Ref
ENR252010F	2.5±0.20	2.0±0.20	1.05 Max.	1.5±0.20	0.8±0.20	0.8±0.20	2.0 Ref	0.8 Ref	0.85 Ref
ENR252012F	2.5±0.20	2.0±0.20	1.26 Max.	1.5±0.20	0.8±0.20	0.8±0.20	2.0 Ref	0.8 Ref	0.85 Ref

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Shape and Dimension



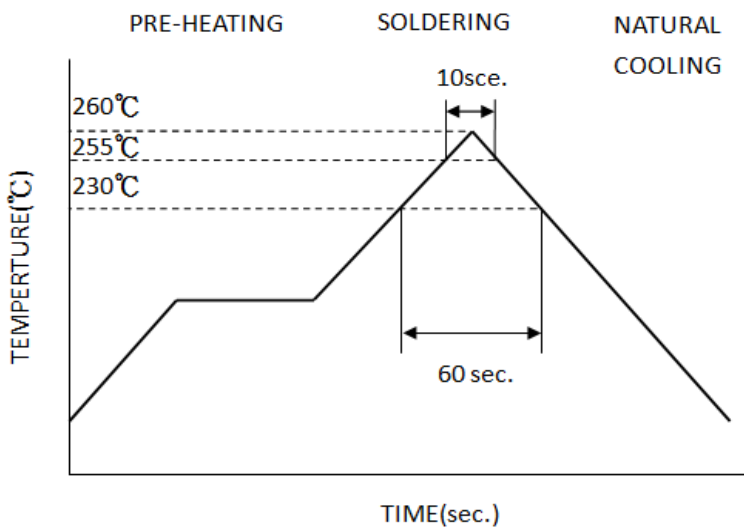
Recommended PCB Pattern



Dimensions in mm

TYPE	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	G(mm)	H(mm)	l(mm)
ENR252010S	2.5±0.20	2.0±0.20	1.00 Max.	1.5±0.20	0.8±0.20	2.0 Ref	0.8 Ref	0.8 Ref
ENR252012S	2.5±0.20	2.0±0.20	1.2±0.20	1.5±0.20	0.8±0.20	2.0 Ref	0.8 Ref	0.8 Ref
ENR3015S	3.0±0.20	3.0±0.20	1.5 Max.	2.5±0.20	0.75±0.20	2.7 Ref	1.5 Ref	0.8 Ref
ENR4018S	4.0±0.20	4.0±0.20	1.85 Max.	3.3±0.20	0.95±0.20	3.7 Ref	1.6 Ref	1.2 Ref
ENR4020S	4.0±0.20	4.0±0.20	2.1 Max.	3.3±0.20	0.95±0.20	3.7 Ref	1.6 Ref	1.2 Ref
ENR4030S	4.0±0.20	4.0±0.20	3.0 Max.	3.3±0.20	0.95±0.20	3.7 Ref	1.6 Ref	1.2 Ref
ENR5020S	5.0±0.20	5.0±0.20	2.0 Max.	4.0±0.20	1.25±0.20	4.2 Ref	2.3 Ref	1.4 Ref
ENR5040S	5.0±0.20	5.0±0.20	4.0 Max.	4.0±0.20	1.25±0.20	4.2 Ref	2.3 Ref	1.4 Ref
ENR6020S	6.0±0.30	6.0±0.30	2.0 Max.	4.9±0.30	1.70±0.30	5.7 Ref	2.8 Ref	1.7 Ref
ENR6028S	6.0±0.30	6.0±0.30	2.8 Max.	4.9±0.30	1.70±0.30	5.7 Ref	2.8 Ref	1.7 Ref
ENR6045S	6.0±0.30	6.0±0.30	4.5 Max.	4.9±0.30	1.70±0.30	5.7 Ref	2.8 Ref	1.7 Ref
ENR8040S	8.0±0.30	8.0±0.30	4.2 Max.	6.3±0.30	2.20±0.30	7.7 Ref	3.8 Ref	2.2 Ref

Recommended Reflow Soldering Conditions.



No mechanical and electrical defects are found after testing based on the above profile and keeping under the conditions of room temperature and humidity for 2 hours.

Twice reflow test is acceptable with the test interval remaining 1 hour under the normal conditions.

The reflow test profile may vary with the testing instruments.

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Electrical Characteristics (ENR201610F TYPE)

Part No.	INDUCTANCE (uH)	DC Resistance (mΩ)		Isat (A) Max.		Irms (A) Max.		Test Frequency
		Max.	Typ.	Max.	Typ.	Max.	Typ.	
ENR201610F-R24M	0.24	40	33	3.7	4.1	2.8	3.1	1MHz / 1V
ENR201610F-R33M	0.33	48	41	3	3.7	2.4	2.9	1MHz / 1V
ENR201610F-R47M	0.47	60	50	2.3	2.85	2.3	2.6	1MHz / 1V
ENR201610F-R68M	0.68	76	63	1.95	2.45	2	2.2	1MHz / 1V
ENR201610F-1R0M	1	114	96	1.65	1.85	1.45	1.6	1MHz / 1V
ENR201610F-2R2M	2.2	265	215	1.2	1.45	1.05	1.15	1MHz / 1V
ENR201610F-4R7M	4.7	480	400	0.75	0.9	0.7	0.8	1MHz / 1V
ENR201610F-100M	10	1000	800	0.65	0.7	0.5	0.6	1MHz / 1V

Electrical Characteristics (ENR252010F TYPE)

Part No.	INDUCTANCE (uH)	DC Resistance (mΩ)		Isat (A) Max.		Irms (A) Max.		Test Frequency
		Max.	Typ.	Max.	Typ.	Max.	Typ.	
ENR252010F-R24M	0.24	34	26	3.6	4.4	2.75	3	1MHz / 1V
ENR252010F-R33M	0.33	43	33	3.6	4.3	2.45	2.7	1MHz / 1V
ENR252010F-R47M	0.47	44	33	2.8	3.2	2.4	2.6	1MHz / 1V
ENR252010F-R68M	0.68	62	51	2.75	3.1	2.1	2.35	1MHz / 1V
ENR252010F-1R0M	1	80	66	2.05	2.5	1.85	2.05	1MHz / 1V
ENR252010F-1R5M	1.5	108	85	1.7	2.05	1.55	1.7	1MHz / 1V
ENR252010F-2R2M	2.2	139	115	1.5	1.75	1.35	1.5	1MHz / 1V
ENR252010F-3R3M	3.3	228	170	1.1	1.35	1.05	1.2	1MHz / 1V
ENR252010F-4R7M	4.7	330	280	1	1.15	0.9	1	1MHz / 1V
ENR252010F-6R8M	6.8	480	400	0.8	0.95	0.72	0.8	1MHz / 1V
ENR252010F-100M	10	600	500	0.65	0.75	0.67	0.74	1MHz / 1V
ENR252010F-150M	15	950	780	0.5	0.6	0.45	0.5	1MHz / 1V

Electrical Characteristics (ENR252012F TYPE)

Part No.	INDUCTANCE (uH)	DC Resistance (mΩ)		Isat (A) Max.		Irms (A) Max.		Test Frequency
		Max.	Typ.	Max.	Typ.	Max.	Typ.	
ENR252012F-R24M	0.24	23	19	4.1	4.8	4.1	4.5	1MHz / 1V
ENR252012F-R33M	0.33	31	26	4	4.7	3.35	3.7	1MHz / 1V
ENR252012F-R47M	0.47	36	31	3.8	4.5	3	3.3	1MHz / 1V
ENR252012F-R68M	0.68	42	33	3	3.3	2.3	2.5	1MHz / 1V
ENR252012F-1R0M	1	60	50	2.25	2.5	2.3	2.6	1MHz / 1V
ENR252012F-1R2M	1.2	78	65	2.2	2.5	2	2.2	1MHz / 1V
ENR252012F-1R5M	1.5	90	75	2	2.35	1.8	2	1MHz / 1V
ENR252012F-2R2M	2.2	100	93	1.8	1.9	1.75	1.9	1MHz / 1V
ENR252012F-3R3M	3.3	156	130	1.2	1.35	1.4	1.5	1MHz / 1V
ENR252012F-4R7M	4.7	228	190	1.1	1.2	1.1	1.2	1MHz / 1V
ENR252012F-6R8M	6.8	360	300	0.9	1.1	0.95	1.05	1MHz / 1V
ENR252012F-100M	10	522	435	0.7	0.85	0.78	0.86	1MHz / 1V

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Electrical Characteristics (ENR252010S TYPE)

Part No.	INDUCTANCE (μ H)	DC Resistance ($m\Omega$) \pm 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR252010S-R68N	0.68	62	2.20	2.00	100KHz / 0.25 V
ENR252010S-1R0N	1	90	1.85	1.65	100KHz / 0.25 V
ENR252010S-1R5M	1.5	152	1.80	1.30	100KHz / 0.25 V
ENR252010S-2R2M	2.2	174	1.20	1.20	100KHz / 0.25 V
ENR252010S-3R3M	3.3	273	1.05	0.90	100KHz / 0.25 V
ENR252010S-4R7M	4.7	469	0.95	0.70	100KHz / 0.25 V
ENR252010S-6R8M	6.8	747	0.78	0.59	100KHz / 0.25 V
ENR252010S-100M	10	910	0.65	0.50	100KHz / 0.25 V

Electrical Characteristics (ENR252012S TYPE)

Part No.	INDUCTANCE (μ H)	DC Resistance ($m\Omega$) \pm 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR252012S-R68N	0.68	73	2.70	1.73	100KHz / 0.25 V
ENR252012S-1R0N	1	85	2.68	1.58	100KHz / 0.25 V
ENR252012S-1R5M	1.5	113	2.24	1.40	100KHz / 0.25 V
ENR252012S-2R2M	2.2	165	2.07	1.15	100KHz / 0.25 V
ENR252012S-3R3M	3.3	200	1.61	1.04	100KHz / 0.25 V
ENR252012S-4R7M	4.7	315	1.18	0.84	100KHz / 0.25 V
ENR252012S-6R8M	6.8	447	0.98	0.69	100KHz / 0.25 V
ENR252012S-8R2M	8.2	506	0.98	0.65	100KHz / 0.25 V
ENR252012S-100M	10	575	0.88	0.62	100KHz / 0.25 V
ENR252012S-150M	15	900	0.62	0.40	100KHz / 0.25 V

Electrical Characteristics (ENR3015S TYPE)

Part No.	INDUCTANCE (μ H)	DC Resistance ($m\Omega$) \pm 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR3015S-1R0N	1	37	2.32	2.1	100KHz / 0.25 V
ENR3015S-1R5N	1.5	50	2	1.7	100KHz / 0.25 V
ENR3015S-2R2N	2.2	60	1.6	1.6	100KHz / 0.25 V
ENR3015S-3R3M	3.3	80	1.32	1.36	100KHz / 0.25 V
ENR3015S-4R7M	4.7	125	1.1	1.09	100KHz / 0.25 V
ENR3015S-5R6M	5.6	170	1.05	1	100KHz / 0.25 V
ENR3015S-6R8M	6.8	200	0.85	0.85	100KHz / 0.25 V
ENR3015S-100M	10	250	0.72	0.77	100KHz / 0.25 V
ENR3015S-150M	15	350	0.66	0.65	100KHz / 0.25 V
ENR3015S-220M	22	460	0.52	0.57	100KHz / 0.25 V
ENR3015S-330M	33	780	0.44	0.42	100KHz / 0.25 V
ENR3015S-470M	47	1200	0.35	0.32	100KHz / 0.25 V

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Electrical Characteristics (ENR4018S TYPE)

Part No.	INDUCTANCE (μ H)	DC Resistance ($m\Omega$) \pm 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR4018S-1R0N	1	23	4.5	2.5	100KHz / 0.25 V
ENR4018S-1R5N	1.5	33	3.35	2.34	100KHz / 0.25 V
ENR4018S-2R2M	2.2	44	2.7	2	100KHz / 0.25 V
ENR4018S-3R3M	3.3	70	2.45	1.9	100KHz / 0.25 V
ENR4018S-4R7M	4.7	90	1.7	1.7	100KHz / 0.25 V
ENR4018S-5R6M	5.6	103	1.6	1.5	100KHz / 0.25 V
ENR4018S-6R8M	6.8	124	1.45	1.3	100KHz / 0.25 V
ENR4018S-8R2M	8.2	180	1.4	1.15	100KHz / 0.25 V
ENR4018S-100M	10	200	1.3	1.1	100KHz / 0.25 V
ENR4018S-150M	15	268	0.94	0.92	100KHz / 0.25 V
ENR4018S-220M	22	390	0.8	0.8	100KHz / 0.25 V
ENR4018S-330M	33	560	0.65	0.6	100KHz / 0.25 V
ENR4018S-470M	47	850	0.57	0.5	100KHz / 0.25 V

Electrical Characteristics (ENR4020S TYPE)

Part No.	INDUCTANCE (μ H)	DC Resistance ($m\Omega$) \pm 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR4020S-1R0N	1	28	5.1	2.15	100KHz / 0.25V
ENR4020S-1R2N	1.2	29	4.7	2.1	100KHz / 0.25V
ENR4020S-1R5N	1.5	35	4.45	1.98	100KHz / 0.25V
ENR4020S-2R2M	2.2	40	3.4	1.85	100KHz / 0.25V
ENR4020S-3R3M	3.3	70	3.2	1.4	100KHz / 0.25V
ENR4020S-4R7M	4.7	80	2.35	1.34	100KHz / 0.25V
ENR4020S-5R6M	5.6	95	2.2	1.22	100KHz / 0.25V
ENR4020S-6R8M	6.8	125	2	1.04	100KHz / 0.25V
ENR4020S-8R2M	8.2	150	1.75	1	100KHz / 0.25V
ENR4020S-100M	10	165	1.6	0.9	100KHz / 0.25V
ENR4020S-120M	12	175	1.5	0.88	100KHz / 0.25V
ENR4020S-150M	15	230	1.35	0.77	100KHz / 0.25V
ENR4020S-220M	22	350	1.05	0.62	100KHz / 0.25V
ENR4020S-330M	33	500	0.85	0.49	100KHz / 0.25V
ENR4020S-470M	47	710	0.74	0.44	100KHz / 0.25V
ENR4020S-680M	68	1250	0.6	0.35	100KHz / 0.25V

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Electrical Characteristics (ENR4030S TYPE)

Part No.	INDUCTANCE (uH)	DC Resistance (mΩ) ± 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR4030S-R47N	0.47	11	7.5	3.5	100KHz / 0.25V
ENR4030S-1R0N	1	15	5.9	3.4	100KHz / 0.25V
ENR4030S-1R5N	1.5	25	4.85	3.3	100KHz / 0.25V
ENR4030S-2R2M	2.2	35	4.1	2.95	100KHz / 0.25V
ENR4030S-3R3M	3.3	40	3.3	2.4	100KHz / 0.25V
ENR4030S-3R9M	3.9	57	3	2.1	100KHz / 0.25V
ENR4030S-4R7M	4.7	60	2.9	2	100KHz / 0.25V
ENR4030S-5R6M	5.6	70	2.75	1.95	100KHz / 0.25V
ENR4030S-6R8M	6.8	75	2.6	1.7	100KHz / 0.25V
ENR4030S-7R5M	7.5	90	2.2	1.65	100KHz / 0.25V
ENR4030S-8R2M	8.2	100	2.1	1.6	100KHz / 0.25V
ENR4030S-100M	10	115	1.95	1.5	100KHz / 0.25V
ENR4030S-120M	12	140	1.7	1.35	100KHz / 0.25V
ENR4030S-150M	15	190	1.65	1.15	100KHz / 0.25V
ENR4030S-180M	18	215	1.4	1.1	100KHz / 0.25V
ENR4030S-220M	22	225	1.3	1	100KHz / 0.25V
ENR4030S-330M	33	330	1.1	0.84	100KHz / 0.25V
ENR4030S-470M	47	500	0.9	0.72	100KHz / 0.25V
ENR4030S-560M	56	560	0.85	0.65	100KHz / 0.25V
ENR4030S-680M	68	750	0.75	0.55	100KHz / 0.25V
ENR4030S-820M	82	950	0.68	0.5	100KHz / 0.25V
ENR4030S-101M	100	1150	0.6	0.45	100KHz / 0.25V
ENR4030S-151M	150	2350	0.5	0.35	100KHz / 0.25V

Electrical Characteristics (ENR5020S TYPE)

Part No.	INDUCTANCE (uH)	DC Resistance (mΩ) ± 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR5020S-1R0N	1	20	4.33	3.7	100KHz / 0.25V
ENR5020S-1R5N	1.5	26	4.1	3.2	100KHz / 0.25V
ENR5020S-2R2N	2.2	38	3.85	2.9	100KHz / 0.25V
ENR5020S-3R3N	3.3	46	3.25	2.4	100KHz / 0.25V
ENR5020S-4R7N	4.7	65	2.4	2.05	100KHz / 0.25V
ENR5020S-6R8N	6.8	92	2.1	1.7	100KHz / 0.25V
ENR5020S-100M	10	125	1.8	1.5	100KHz / 0.25V
ENR5020S-150M	15	180	1.44	1.25	100KHz / 0.25V
ENR5020S-220M	22	250	1.18	1.05	100KHz / 0.25V
ENR5020S-330M	33	370	0.97	0.83	100KHz / 0.25V
ENR5020S-470M	47	560	0.81	0.7	100KHz / 0.25V

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Electrical Characteristics (ENR5040S TYPE)

Part No.	INDUCTANCE (μ H)	DC Resistance ($m\Omega$) \pm 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR5040S-1R0N	1	13	7.35	4.9	100KHz / 0.25V
ENR5040S-1R5N	1.5	15	6.3	4.3	100KHz / 0.25V
ENR5040S-2R2N	2.2	19	4.9	3.8	100KHz / 0.25V
ENR5040S-2R7N	2.7	22	4.3	3.6	100KHz / 0.25V
ENR5040S-3R3N	3.3	24	3.95	3.4	100KHz / 0.25V
ENR5040S-3R9N	3.9	27	3.55	3.2	100KHz / 0.25V
ENR5040S-4R7N	4.7	30	3.5	3	100KHz / 0.25V
ENR5040S-5R6M	5.6	33	3.2	2.8	100KHz / 0.25V
ENR5040S-6R8M	6.8	43	2.9	2.5	100KHz / 0.25V
ENR5040S-100M	10	64	2.35	2.1	100KHz / 0.25V
ENR5040S-150M	15	86	2	2	100KHz / 0.25V
ENR5040S-220M	22	129	1.6	1.5	100KHz / 0.25V
ENR5040S-270M	27	165	1.5	1.3	100KHz / 0.25V
ENR5040S-330M	33	188	1.3	1.2	100KHz / 0.25V
ENR5040S-470M	47	270	1.1	1	100KHz / 0.25V
ENR5040S-680M	68	400	0.9	0.8	100KHz / 0.25V
ENR5040S-101M	100	560	0.75	0.7	100KHz / 0.25V

Electrical Characteristics (ENR6020S TYPE)

Part No.	INDUCTANCE (μ H)	DC Resistance ($m\Omega$) \pm 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR6020S-1R0N	1	20	4.3	3.5	100KHz / 0.25V
ENR6020S-1R5N	1.5	25	4.25	3.2	100KHz / 0.25V
ENR6020S-2R2N	2.2	35	3.75	2.75	100KHz / 0.25V
ENR6020S-3R3N	3.3	45	3.15	2.6	100KHz / 0.25V
ENR6020S-4R7N	4.7	58	3	2	100KHz / 0.25V
ENR6020S-5R6M	5.6	70	2.4	1.9	100KHz / 0.25V
ENR6020S-6R8M	6.8	85	2.2	1.8	100KHz / 0.25V
ENR6020S-100M	10	120	1.75	1.4	100KHz / 0.25V
ENR6020S-150M	15	160	1.5	1.2	100KHz / 0.25V
ENR6020S-220M	22	240	1.25	1	100KHz / 0.25V
ENR6020S-270M	27	350	1.15	0.95	100KHz / 0.25V
ENR6020S-330M	33	400	1.1	0.9	100KHz / 0.25V
ENR6020S-470M	47	500	1	0.8	100KHz / 0.25V

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Electrical Characteristics (ENR6028S TYPE)

Part No.	INDUCTANCE (μ H)	DC Resistance ($m\Omega$) \pm 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR6028S-1R0N	1	12	6.7	4.6	100KHz / 0.25V
ENR6028S-1R5N	1.5	16	6	4.3	100KHz / 0.25V
ENR6028S-2R2N	2.2	20	5.1	3.75	100KHz / 0.25V
ENR6028S-3R3N	3.3	25	3.63	3.4	100KHz / 0.25V
ENR6028S-4R7N	4.7	33	3	3	100KHz / 0.25V
ENR6028S-5R6N	5.6	45	2.8	2.45	100KHz / 0.25V
ENR6028S-6R8M	6.8	56	2.6	2.4	100KHz / 0.25V
ENR6028S-8R2M	8.2	68	2.4	2.25	100KHz / 0.25V
ENR6028S-100M	10	78	2.05	1.9	100KHz / 0.25V
ENR6028S-120M	12	88	1.8	1.7	100KHz / 0.25V
ENR6028S-150M	15	125	1.75	1.5	100KHz / 0.25V
ENR6028S-180M	18	130	1.55	1.45	100KHz / 0.25V
ENR6028S-220M	22	140	1.45	1.4	100KHz / 0.25V
ENR6028S-270M	27	180	1.4	1.3	100KHz / 0.25V
ENR6028S-330M	33	220	1.35	1.1	100KHz / 0.25V
ENR6028S-390M	39	225	1.25	1.1	100KHz / 0.25V
ENR6028S-470M	47	280	1.15	1.05	100KHz / 0.25V
ENR6028S-680M	68	420	0.95	0.85	100KHz / 0.25V
ENR6028S-820M	82	550	0.8	0.7	100KHz / 0.25V
ENR6028S-101M	100	670	0.65	0.6	100KHz / 0.25V

Electrical Characteristics (ENR6045S TYPE)

Part No.	INDUCTANCE (μ H)	DC Resistance ($m\Omega$) \pm 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR6045S-1R0N	1	10	9	5.1	100KHz / 0.25V
ENR6045S-1R5N	1.5	12	7.5	4.75	100KHz / 0.25V
ENR6045S-2R2N	2.2	13	6.5	4.6	100KHz / 0.25V
ENR6045S-3R3N	3.3	20	5.3	3.2	100KHz / 0.25V
ENR6045S-3R9N	3.9	20	4.9	3.2	100KHz / 0.25V
ENR6045S-4R7N	4.7	24	4.5	3	100KHz / 0.25V
ENR6045S-5R6N	5.6	31	3.7	2.8	100KHz / 0.25V
ENR6045S-6R8M	6.8	33	3.3	2.7	100KHz / 0.25V
ENR6045S-8R2M	8.2	45	3.2	2.6	100KHz / 0.25V
ENR6045S-100M	10	52	3	2.5	100KHz / 0.25V
ENR6045S-120M	12	58	2.8	2.2	100KHz / 0.25V
ENR6045S-150M	15	77	2.5	1.9	100KHz / 0.25V
ENR6045S-220M	22	115	2	1.5	100KHz / 0.25V
ENR6045S-270M	27	146	1.9	1.48	100KHz / 0.25V
ENR6045S-330M	33	150	1.6	1.45	100KHz / 0.25V
ENR6045S-390M	39	180	1.5	1.25	100KHz / 0.25V
ENR6045S-470M	47	220	1.4	1.2	100KHz / 0.25V

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Electrical Characteristics (ENR6045S TYPE)

Part No.	INDUCTANCE (uH)	DC Resistance (mΩ) ± 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR6045S-560M	56	260	1.3	1.1	100KHz / 0.25V
ENR6045S-680M	68	290	1.2	0.9	100KHz / 0.25V
ENR6045S-101M	100	430	1	0.8	100KHz / 0.25V

Electrical Characteristics (ENR8040S TYPE)

Part No.	INDUCTANCE (uH)	DC Resistance (mΩ) ± 30%	Isat (A) Max.	Irms (A) Max.	Test Frequency
ENR8040S-R56N	0.56	5	11.5	7.6	100KHz / 0.25V
ENR8040S-1R0N	1	8	9.85	6.3	100KHz / 0.25V
ENR8040S-1R5N	1.5	10	8.15	5.65	100KHz / 0.25V
ENR8040S-2R2N	2.2	12	7.1	5.15	100KHz / 0.25V
ENR8040S-3R3N	3.3	17	6.5	4.4	100KHz / 0.25V
ENR8040S-4R7N	4.7	20	5.9	4	100KHz / 0.25V
ENR8040S-5R6N	5.6	24	5.5	3.8	100KHz / 0.25V
ENR8040S-6R8M	6.8	28	4.55	3.6	100KHz / 0.25V
ENR8040S-8R2M	8.2	35	4.2	3.4	100KHz / 0.25V
ENR8040S-100M	10	37	3.6	3.1	100KHz / 0.25V
ENR8040S-150M	15	56	2.95	2.5	100KHz / 0.25V
ENR8040S-220M	22	74	2.4	2	100KHz / 0.25V
ENR8040S-330M	33	100	2.05	1.7	100KHz / 0.25V
ENR8040S-470M	47	158	1.75	1.5	100KHz / 0.25V
ENR8040S-680M	68	196	1.45	1.2	100KHz / 0.25V
ENR8040S-101M	100	295	1.15	1	100KHz / 0.25V
ENR8040S-151M	150	470	1.1	0.8	100KHz / 0.25V
ENR8040S-181M	180	610	0.9	0.75	100KHz / 0.25V
ENR8040S-221M	220	660	0.85	0.7	100KHz / 0.25V
ENR8040S-331M	330	970	0.68	0.55	100KHz / 0.25V

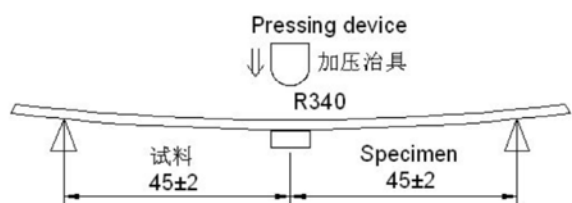
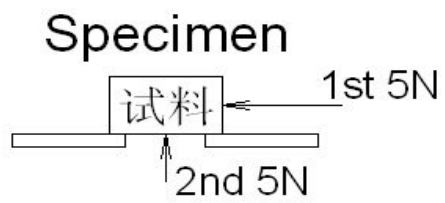
Note

1. □ Tolerance : J=5% ; K=10% ; M=20% ; N=30%
2. Specifications which provide more details for the proper and safe use of the described product are available upon request. all specifications are subject to change without notice.
3. Isat : DC Saturation Current that will cause initial inductance to drop approximately 30% max.
4. Irms : DC Current that will cause an approximate ΔT of 40 °C

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Reliability and Test Conditions(可靠性測試條件)

General Characteristics

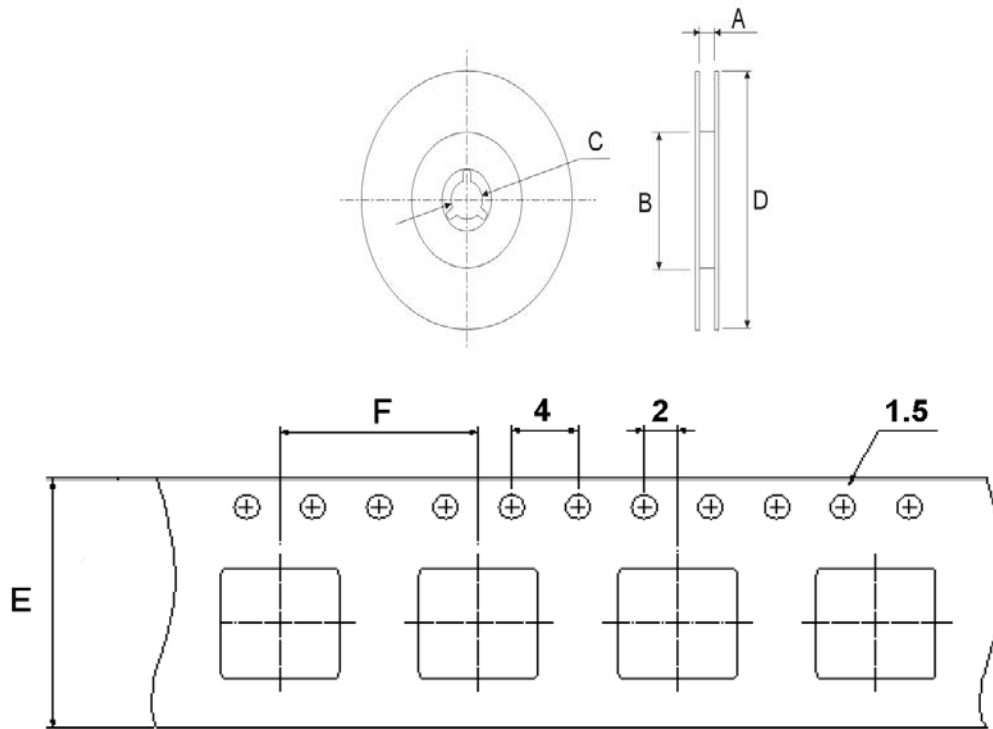
Item	Conditions	Specification
Temperature drift	To be measured in the range of -25°C to 85°C.	Inductance temperature coefficient 2000 ppm/°C or less.
Storage Temperature	With taping.	-40°C ~ +105°C
Operating Temperature	Including self temperature rise.	-40°C ~ +125°C
Bending test	<p>Apply pressure gradually in the direction of the arrow at a rate of about 0.5mm/s until bent depth reaches 3mm and hold for 30±5s.</p>  <p>Board: 40*100mm, Thickness: 1.0mm</p>	<p>Change from an initial value.</p> <p>L : within±10%</p>
Adhesion strength	<p>A static load using a R0.5 pressing tool shall be applied the arrow and to the body of the specimen in the direction of the arrow and shall be hold for 60±5s. Measure after removing pressure.</p> 	<p>Change from an initial value.</p> <p>L : within±10%</p>
Vibration	The specimen shall be subjected to a vibration of 1.5mm amplitude, sweep frequency 10~55Hz (10Hz to 55Hz to 10Hz in a period of one minute) for 1hr in each of 3(X,Y,Z) axes.	<p>Change from an initial value.</p> <p>L : within±10%</p>
Mechanicalshock	<p>Peak acceleration: 981 m/S² Duration of pulse: 6ms 3 times in each of 3(X,Y,Z)axes. The specimen must be fixed on test board. Three successive shock shall be applied in the perpendicular direction of each surface of the specimen</p>	<p>Change from an initial value.</p> <p>L : within±10%</p>
Free fall test	<p>The specimen must be fixed on test board. It must be equipped with instruments of which weight is 500g. Then it shall be fallen freely from 1m height to rigid wood 3 times in each of three axes</p>	<p>Change from an initial value.</p> <p>L : within±10%</p>

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Solder ability	Terminals shall be immersed for 5 to 10 seconds in flux at room temperature. Dip sample into solder bath containing molten solder at $245\pm 5^{\circ}\text{C}$ for 3 ± 0.5 seconds.	New solder shall cover of the surface 90% minimum of the surface immersed.
Dielectric strength	100V DC shall be applied for 60s between the terminal and the core. Test method Reflow soldering method Preheat $150\sim 180^{\circ}\text{C}$ $90\pm 30\text{s}$ Peak temp $250(+ 5, -0)^{\circ}\text{C}$ (230°C min , $30\pm 10\text{s}$)	Without damage.
Resistance to soldering heat	The specimen shall be subjected to the reflow process under the above condition 2 times. Test board shall be 0.8mm thick. Base material shall be glass epoxy resin. The specimen shall be stored at standard atmospheric conditions for 1hr in prior to the measurement.	Change from an initial value. L : within $\pm 10\%$
Insulation resistance	100V DC shall be applied between the terminal and the core.	100m Ω or more.
Dry heat	The specimen shall be stored at a temperature of $85 \pm 2^{\circ}\text{C}$ for $500\pm 12\text{hr}$. Then it shall be stabilized under standard atmospheric conditions for 1hr before measurement. Measurement shall be made within 1hr.	Change from an initial value. L : within $\pm 10\%$
Dump heat	The specimen shall be stored at a temperature of $60 \pm 2^{\circ}\text{C}$ relative humidity of 90 ~ 95%. Then it shall be stabilized under standard atmospheric conditions for 1hr before measurement, Measurement shall be made within 1hr.	Change from an initial value. L : within $\pm 10\%$
Temperature cycle	The specimen shall be subjected to 500 continuous cycles of temperature change of -40°C for 30 min and 85°C for 30 min with the transit period of 2min or less. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement, Measurement shall be made within 1hr.	Change from an initial value. L : within $\pm 10\%$

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.Packing Specifications



TYPE	Packaging Quantity		Tape and Reel Dimension(mm)					
	Reel	Inner	A	B	C	D	E	F
ENR201610F	2000	10000	8	60	13	178	8	8
ENR252010F	2000	10000	8	60	13	178	8	8
ENR252012F	2000	10000	8	60	13	178	8	8
ENR252010S	2000	10000	8	60	13	178	8	8
ENR252012S	2000	10000	8	60	13	178	8	8
ENR3015S	2000	10000	8	60	13	178	8	8
ENR4018S	3000	9000	12	100	13	330	12	8
ENR4020S	3000	9000	12	100	13	330	12	8
ENR4030S	2000	6000	12	100	13	330	12	8
ENR5020S	3000	9000	12	100	13	330	12	8
ENR5040S	1500	4500	12	100	13	330	12	8
ENR6020S	3000	9000	12	100	13	330	12	8
ENR6028S	2000	6000	12	100	13	330	12	8
ENR6045S	1500	4500	12	100	13	330	12	8
ENR8040S	1000	3000	16	80	13	330	16	8