

Wire Wound SMD Power Inductors / ENRS Series

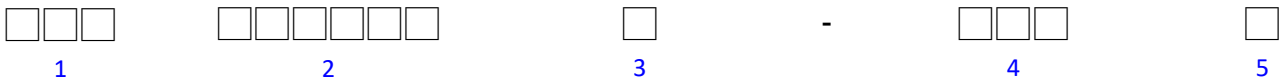
Feature:

1. Magnetic-resin shielded construction reduces buzz noise to ultra-low levels.
2. Metallization on ferrite core results in excellent shock and damage-free durability.
3. Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference. (EMI)
4. 30% higher current rating than conventional inductors of equal size.
5. Takes up less PCB real estate and save more power.

Applications:

1. LED Lighting
2. Next-generation mobile devices with multifunction such as mobile TV and digital movie cameras.
3. Flat-screen TVs, blue-ray disc recorders, set top box
4. Notebooks, desktop computers, servers, graphic cards
5. Portable gaming devices, personal navigation systems, personal multimedia devices
6. Automotive systems
7. Telecomm base stations

Product Identification



Series name	Dimensions (LxWxH)		Internal Code
ENRS	252010	2.5 x 2.0 x 1.0 mm	S = Standard
	3010	3.0 x 3.0 x 1.0 mm	
	4010	4.0 x 4.0 x 1.0 mm	

Inductance		Tolerance	
R47	0.47	M	20%
1R0	1	N	30%
R82	0.82		

Rating

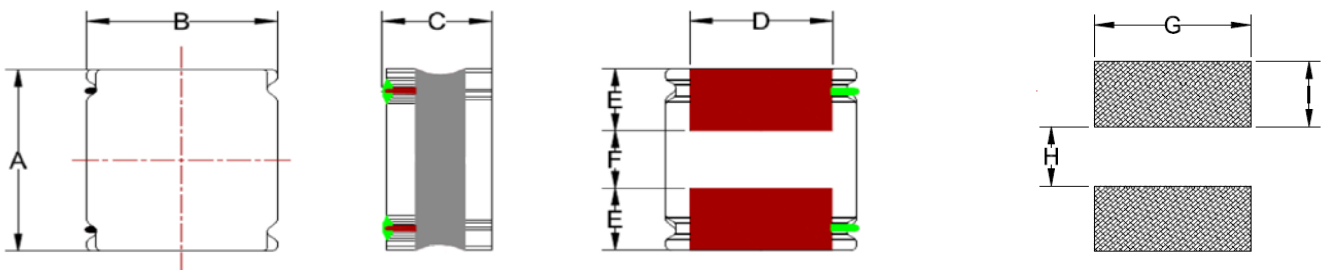
Storage Temperature range : -40°C ~ +125°C

Operating temperature range : -40°C ~ +125°C (Including coil's self temperature rise)

Shape and Dimension

Recommended PCB Pattern

Fig.1



Dimensions in mm

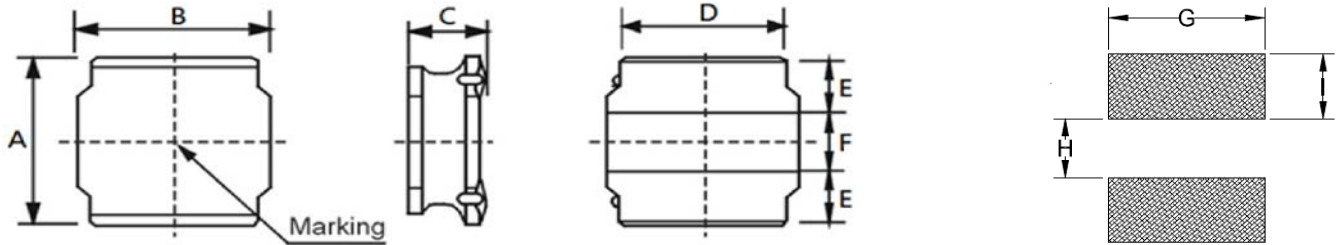
TYPE	Shape	A	B	C	D	E	F	G	H	I
ENRS252012S	Fig.1	2.50±0.10	2.00±0.10	1.20 Max.	1.50±0.20	0.80±0.20	0.80±0.20	2.00 Typ	0.80 Ref	0.85 Ref

Wire Wound SMD Power Inductors / ENRS Series

Shape and Dimension

Recommended PCB Pattern

Fig.2



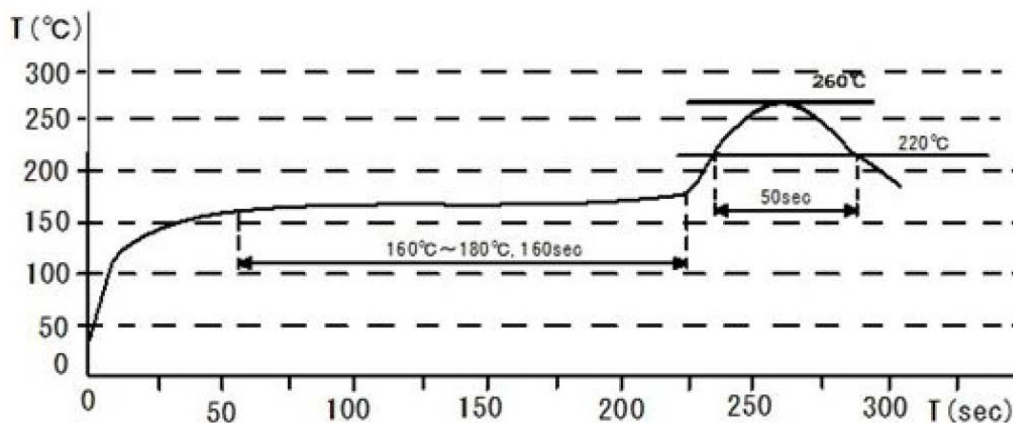
Dimensions in mm

TYPE	Shape	A	B	C	D	E	F	G	H	I
ENRS3015S	Fig.2	3.00±0.20	3.00±0.20	1.50 Max.	2.50±0.20	0.75±0.20	1.50±0.20	2.70 Typ	1.50 Ref	0.80 Ref
ENRS4018S	Fig.2	4.00±0.20	4.00±0.20	1.80 Max.	3.30±0.20	0.95±0.20	2.10±0.20	3.70 Typ	1.90 Ref	1.10 Ref
ENRS4020S	Fig.2	4.00±0.20	4.00±0.20	2.00 Max.	3.30±0.20	0.95±0.20	2.10±0.20	3.70 Typ	1.90 Ref	1.10 Ref
ENRS4030S	Fig.2	4.00±0.20	4.00±0.20	3.00 Max.	3.30±0.20	0.95±0.20	2.10±0.20	3.70 Typ	1.90 Ref	1.10 Ref
ENRS5020S	Fig.2	5.00±0.20	5.00±0.20	2.00 Max.	4.00±0.20	1.25±0.20	2.50±0.20	4.20 Typ	2.30 Ref	1.40 Ref
ENRS5040S	Fig.2	5.00±0.20	5.00±0.20	4.00 Max.	4.00±0.20	1.25±0.20	2.50±0.20	4.20 Typ	2.30 Ref	1.40 Ref
ENRS6020S	Fig.2	6.00±0.30	6.00±0.30	2.00 Max.	4.90±0.30	1.55±0.30	2.90±0.30	5.70 Typ	2.80 Ref	1.70 Ref
ENRS6028S	Fig.2	6.00±0.30	6.00±0.30	2.80 Max.	4.90±0.30	1.55±0.30	2.90±0.30	5.70 Typ	2.80 Ref	1.70 Ref
ENRS6045S	Fig.2	6.00±0.30	6.00±0.30	4.50 Max.	4.90±0.30	1.55±0.30	2.90±0.30	5.70 Typ	2.80 Ref	1.70 Ref
ENRS8040S	Fig.2	8.00±0.30	8.00±0.30	4.20 Max.	6.30±0.30	2.00±0.30	4.00±0.30	7.50 Typ	3.80 Ref	2.20 Ref

Note.

1. All products are printed with Marking except the 252010, 252012, 3010, 3012 and 3015 series.

Recommended Reflow Conditions.



Wire Wound SMD Power Inductors / ENRS Series

Electrical Characteristics (ENRS252012S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance $\pm 30\%$ (Ω)		Isat (A)		I _{rms} (A)		Test Frequency
			Max.	Typ.	Max.	Typ.	Max.	Typ.	
ENRS252012S-R47N	0.47	30	0.061	0.047	3.82	4.27	2.15	2.34	100 KHz / 1V
ENRS252012S-R68N	0.68	30	0.074	0.057	3.28	3.68	1.95	2.13	100 KHz / 1V
ENRS252012S-1R0N	1.0	30	0.090	0.069	2.59	2.90	1.93	2.10	100 KHz / 1V
ENRS252012S-1R2N	1.2	30	0.129	0.099	2.38	2.67	1.46	1.59	100 KHz / 1V
ENRS252012S-1R5M	1.5	20	0.147	0.113	2.24	2.51	1.40	1.53	100 KHz / 1V
ENRS252012S-2R2M	2.2	20	0.216	0.166	1.85	2.07	1.15	1.25	100 KHz / 1V
ENRS252012S-2R7M	2.7	20	0.239	0.184	1.72	1.92	1.09	1.19	100 KHz / 1V
ENRS252012S-3R3M	3.3	20	0.264	0.203	1.61	1.80	1.04	1.13	100 KHz / 1V
ENRS252012S-3R6M	3.6	20	0.348	0.268	1.46	1.64	0.90	0.98	100 KHz / 1V
ENRS252012S-4R3M	4.3	20	0.377	0.290	1.37	1.53	0.87	0.95	100 KHz / 1V
ENRS252012S-4R7M	4.7	20	0.377	0.290	1.12	1.25	0.84	0.92	100 KHz / 1V
ENRS252012S-5R1M	5.1	20	0.500	0.385	1.23	1.37	0.75	0.82	100 KHz / 1V
ENRS252012S-5R6M	5.6	20	0.538	0.414	1.11	1.25	0.73	0.80	100 KHz / 1V
ENRS252012S-6R2M	6.2	20	0.542	0.417	1.03	1.16	0.73	0.80	100 KHz / 1V
ENRS252012S-6R8M	6.8	20	0.581	0.447	0.98	1.09	0.69	0.75	100 KHz / 1V
ENRS252012S-7R5M	7.5	20	0.611	0.470	0.97	1.09	0.68	0.74	100 KHz / 1V
ENRS252012S-8R2M	8.2	20	0.658	0.506	0.98	1.10	0.65	0.71	100 KHz / 1V
ENRS252012S-9R1M	9.1	20	0.690	0.531	0.91	1.02	0.62	0.68	100 KHz / 1V
ENRS252012S-100M	10	20	0.690	0.531	0.79	0.88	0.62	0.68	100 KHz / 1V
ENRS252012S-120M	12	20	1.075	0.827	0.78	0.88	0.51	0.56	100 KHz / 1V
ENRS252012S-150M	15	20	1.591	1.224	0.68	0.77	0.42	0.46	100 KHz / 1V
ENRS252012S-220M	22	20	1.976	1.520	0.53	0.59	0.38	0.41	100 KHz / 1V

Electrical Characteristics (ENRS3015S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance $\pm 30\%$ (Ω)		Isat (A)		I _{rms} (A)		Test Frequency
			Max.	Typ.	Max.	Typ.	Max.	Typ.	
ENRS3015S-R50N	0.5	30	0.039	0.030	3.90	4.20	2.60	2.80	100 KHz / 1V
ENRS3015S-1R0N	1.0	30	0.039	0.030	2.32	2.80	2.35	2.50	100 KHz / 1V
ENRS3015S-1R2N	1.2	30	0.052	0.040	2.21	3.10	1.95	2.30	100 KHz / 1V
ENRS3015S-1R5N	1.5	30	0.065	0.050	2.30	2.70	1.70	2.20	100 KHz / 1V
ENRS3015S-1R8N	1.8	30	0.065	0.050	1.75	2.20	1.70	2.20	100 KHz / 1V
ENRS3015S-2R2N	2.2	30	0.078	0.060	1.60	2.00	1.60	2.00	100 KHz / 1V
ENRS3015S-2R7N	2.7	30	0.098	0.075	1.52	1.90	1.43	1.90	100 KHz / 1V
ENRS3015S-3R3M	3.3	20	0.104	0.080	1.32	1.81	1.36	1.60	100 KHz / 1V
ENRS3015S-3R6M	3.6	20	0.137	0.105	1.28	1.60	1.20	1.50	100 KHz / 1V
ENRS3015S-3R9M	3.9	20	0.137	0.105	1.20	1.40	1.20	1.50	100 KHz / 1V
ENRS3015S-4R3M	4.3	20	0.150	0.115	1.20	1.40	1.14	1.30	100 KHz / 1V
ENRS3015S-4R7M	4.7	20	0.163	0.125	1.10	1.40	1.09	1.30	100 KHz / 1V
ENRS3015S-5R1M	5.1	20	0.173	0.133	1.00	1.20	1.05	1.20	100 KHz / 1V
ENRS3015S-6R2M	6.2	20	0.254	0.195	1.00	1.20	0.86	1.00	100 KHz / 1V
ENRS3015S-6R8M	6.8	20	0.260	0.200	0.85	1.10	0.85	1.10	100 KHz / 1V
ENRS3015S-100M	10	20	0.325	0.250	0.72	0.92	0.77	0.90	100 KHz / 1V
ENRS3015S-120M	12	20	0.416	0.320	0.70	0.90	0.68	0.89	100 KHz / 1V

Wire Wound SMD Power Inductors / ENRS Series

Electrical Characteristics (ENRS3015S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance $\pm 30\%$ (Ω)		Isat (A)		Irms (A)		Test Frequency
			Max.	Typ.	Max.	Typ.	Max.	Typ.	
ENRS3015S-150M	15	20	0.455	0.350	0.66	0.88	0.65	0.72	100 KHz / 1V
ENRS3015S-180M	18	20	0.559	0.430	0.56	0.72	0.59	0.72	100 KHz / 1V
ENRS3015S-220M	22	20	0.598	0.460	0.52	0.68	0.57	0.69	100 KHz / 1V
ENRS3015S-270M	27	20	0.949	0.730	0.48	0.56	0.45	0.56	100 KHz / 1V
ENRS3015S-330M	33	20	1.066	0.820	0.44	0.53	0.43	0.51	100 KHz / 1V
ENRS3015S-390M	39	20	1.294	0.995	0.41	0.55	0.39	0.44	100 KHz / 1V
ENRS3015S-430M	43	20	1.378	1.060	0.37	0.43	0.37	0.48	100 KHz / 1V
ENRS3015S-470M	47	20	1.625	1.250	0.35	0.43	0.35	0.44	100 KHz / 1V
ENRS3015S-560M	56	20	1.664	1.280	0.33	0.42	0.34	0.41	100 KHz / 1V
ENRS3015S-620M	62	20	2.093	1.610	0.30	0.40	0.30	0.41	100 KHz / 1V
ENRS3015S-680M	68	20	3.510	2.700	0.28	0.37	0.23	0.31	100 KHz / 1V
ENRS3015S-101M	100	20	4.043	3.110	0.23	0.25	0.21	0.25	100 KHz / 1V
ENRS3015S-151M	150	20	4.940	3.800	0.18	0.22	0.19	0.23	100 KHz / 1V

Electrical Characteristics (ENRS4018S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance $\pm 30\%$ (Ω)	Isat (A)	Irms (A)	Test Frequency
ENRS4018S-1R0N	1.0	30	0.025	4.50	2.50	100 KHz / 1V
ENRS4018S-1R5N	1.5	30	0.030	3.35	2.34	100 KHz / 1V
ENRS4018S-2R2M	2.2	20	0.044	2.70	2.00	100 KHz / 1V
ENRS4018S-3R3M	3.3	20	0.070	2.45	1.90	100 KHz / 1V
ENRS4018S-4R7M	4.7	20	0.090	1.70	1.70	100 KHz / 1V
ENRS4018S-5R6M	5.6	20	0.103	1.60	1.50	100 KHz / 1V
ENRS4018S-6R8M	6.8	20	0.124	1.45	1.30	100 KHz / 1V
ENRS4018S-8R2M	8.2	20	0.180	1.40	1.15	100 KHz / 1V
ENRS4018S-100M	10	20	0.200	1.30	1.10	100 KHz / 1V
ENRS4018S-150M	15	20	0.268	0.94	0.92	100 KHz / 1V
ENRS4018S-220M	22	20	0.390	0.80	0.80	100 KHz / 1V
ENRS4018S-330M	33	20	0.560	0.65	0.60	100 KHz / 1V
ENRS4018S-470M	47	20	0.756	0.57	0.50	100 KHz / 1V

Electrical Characteristics (ENRS4020S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance $\pm 30\%$ (Ω)	Isat (A)	Irms (A)	Test Frequency
ENRS4020S-1R0N	1.0	30	0.028	5.10	2.15	100 KHz / 1V
ENRS4020S-1R2N	1.2	30	0.029	4.70	2.10	100 KHz / 1V
ENRS4020S-1R5N	1.5	30	0.035	4.45	1.98	100 KHz / 1V
ENRS4020S-2R2M	2.2	20	0.040	3.40	1.85	100 KHz / 1V
ENRS4020S-3R3M	3.3	20	0.070	3.20	1.40	100 KHz / 1V
ENRS4020S-4R7M	4.7	20	0.080	2.35	1.34	100 KHz / 1V
ENRS4020S-5R6M	5.6	20	0.950	2.20	1.22	100 KHz / 1V
ENRS4020S-6R8M	6.8	20	0.125	2.00	1.04	100 KHz / 1V
ENRS4020S-8R2M	8	20	0.150	1.75	1.00	100 KHz / 1V
ENRS4020S-100M	10	20	0.165	1.60	0.90	100 KHz / 1V

Wire Wound SMD Power Inductors / ENRS Series

Electrical Characteristics (ENRS4020S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance ±30% (Ω)	Isat (A)	Irms (A)	Test Frequency
ENRS4020S-120M	12	20	0.175	1.50	0.88	100 KHz / 1V
ENRS4020S-150M	15	20	0.230	1.35	0.77	100 KHz / 1V
ENRS4020S-220M	22	20	0.350	1.05	0.62	100 KHz / 1V
ENRS4020S-330M	33	20	0.500	0.85	0.49	100 KHz / 1V
ENRS4020S-470M	47	20	0.710	0.74	0.44	100 KHz / 1V
ENRS4020S-680M	68	20	1.250	0.60	0.35	100 KHz / 1V

Electrical Characteristics (ENRS4030S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance ±30% (Ω)	Isat (A)	Irms (A)	Test Frequency
ENRS4030S-1R0N	1.0	30	0.015	5.90	3.40	100 KHz / 1V
ENRS4030S-1R5N	1.5	30	0.025	4.85	3.30	100 KHz / 1V
ENRS4030S-2R2M	2.2	20	0.035	4.10	2.95	100 KHz / 1V
ENRS4030S-3R3M	3.3	20	0.040	3.30	2.40	100 KHz / 1V
ENRS4030S-3R9M	3.9	20	0.057	3.00	2.10	100 KHz / 1V
ENRS4030S-4R7M	4.7	20	0.060	2.90	2.00	100 KHz / 1V
ENRS4030S-5R6M	5.6	20	0.070	2.75	1.95	100 KHz / 1V
ENRS4030S-6R8M	6.8	20	0.075	2.60	1.70	100 KHz / 1V
ENRS4030S-7R5M	7.5	20	0.090	2.20	1.65	100 KHz / 1V
ENRS4030S-8R2M	8.2	20	0.100	2.10	1.60	100 KHz / 1V
ENRS4030S-100M	10	20	0.115	1.95	1.50	100 KHz / 1V
ENRS4030S-120M	12	20	0.140	1.70	1.35	100 KHz / 1V
ENRS4030S-150M	15	20	0.190	1.65	1.15	100 KHz / 1V
ENRS4030S-180M	18	20	0.215	1.40	1.10	100 KHz / 1V
ENRS4030S-220M	22	20	0.225	1.30	1.00	100 KHz / 1V
ENRS4030S-330M	33	20	0.330	1.10	0.84	100 KHz / 1V
ENRS4030S-470M	47	20	0.500	0.90	0.72	100 KHz / 1V
ENRS4030S-560M	56	20	0.560	0.85	0.65	100 KHz / 1V
ENRS4030S-680M	68	20	0.750	0.75	0.55	100 KHz / 1V
ENRS4030S-820M	82	20	0.950	0.68	0.50	100 KHz / 1V
ENRS4030S-101M	100	20	1.150	0.60	0.45	100 KHz / 1V
ENRS4030S-151M	150	20	2.350	0.50	0.35	100 KHz / 1V

Wire Wound SMD Power Inductors / ENRS Series

Electrical Characteristics (ENRS5020S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance $\pm 30\%$ (Ω)	Isat (A)	Irms (A)	Test Frequency
ENRS5020S-1R0N	1.0	30	0.020	4.33	3.70	100 KHz / 1V
ENRS5020S-1R5N	1.5	30	0.026	4.10	3.20	100 KHz / 1V
ENRS5020S-2R2N	2.2	30	0.038	3.85	2.90	100 KHz / 1V
ENRS5020S-3R3N	3.3	30	0.046	3.25	2.40	100 KHz / 1V
ENRS5020S-4R7M	4.7	20	0.065	2.40	2.05	100 KHz / 1V
ENRS5020S-6R8M	6.8	20	0.092	2.10	1.70	100 KHz / 1V
ENRS5020S-8R2M	8.2	20	0.100	1.90	1.60	100 KHz / 1V
ENRS5020S-100M	10	20	0.125	1.80	1.50	100 KHz / 1V
ENRS5020S-150M	15	20	0.180	1.44	1.25	100 KHz / 1V
ENRS5020S-220M	22	20	0.250	1.18	1.05	100 KHz / 1V
ENRS5020S-330M	33	20	0.370	0.97	0.83	100 KHz / 1V
ENRS5020S-470M	47	20	0.560	0.81	0.70	100 KHz / 1V

Electrical Characteristics (ENRS5040S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance $\pm 30\%$ (Ω)	Isat (A)	Irms (A)	Test Frequency
ENRS5040S-1R0N	1.0	30	0.013	7.35	4.90	100 KHz / 1V
ENRS5040S-1R5N	1.5	30	0.015	6.30	4.30	100 KHz / 1V
ENRS5040S-2R2N	2.2	30	0.019	4.90	3.80	100 KHz / 1V
ENRS5040S-2R7N	2.7	30	0.022	4.30	3.60	100 KHz / 1V
ENRS5040S-3R3N	3.3	30	0.024	3.95	3.40	100 KHz / 1V
ENRS5040S-3R9N	3.9	30	0.027	3.55	3.20	100 KHz / 1V
ENRS5040S-4R7N	4.7	30	0.030	3.50	3.00	100 KHz / 1V
ENRS5040S-5R6M	5.6	20	0.033	3.20	2.80	100 KHz / 1V
ENRS5040S-6R8M	6.8	20	0.043	2.90	2.50	100 KHz / 1V
ENRS5040S-100M	10	20	0.064	2.35	2.10	100 KHz / 1V
ENRS5040S-150M	15	20	0.086	2.00	2.00	100 KHz / 1V
ENRS5040S-220M	22	20	0.129	1.60	1.50	100 KHz / 1V
ENRS5040S-270M	27	20	0.165	1.50	1.30	100 KHz / 1V
ENRS5040S-330M	33	20	0.188	1.30	1.20	100 KHz / 1V
ENRS5040S-470M	47	20	0.270	1.10	1.00	100 KHz / 1V
ENRS5040S-680M	68	20	0.400	0.90	0.80	100 KHz / 1V
ENRS5040S-101M	100	20	0.560	0.75	0.70	100 KHz / 1V

Wire Wound SMD Power Inductors / ENRS Series

Electrical Characteristics (ENRS6020S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance ±30% (Ω)	Isat (A)	Irms (A)	Test Frequency
ENRS6020S-1R0N	1.0	30	0.020	4.30	3.50	100 KHz / 1V
ENRS6020S-1R5N	1.5	30	0.025	4.25	3.20	100 KHz / 1V
ENRS6020S-2R2N	2.2	30	0.035	3.75	2.75	100 KHz / 1V
ENRS6020S-3R3N	3.3	30	0.045	3.15	2.60	100 KHz / 1V
ENRS6020S-4R7N	4.7	30	0.058	3.00	2.00	100 KHz / 1V
ENRS6020S-5R6M	5.6	20	0.070	2.40	1.90	100 KHz / 1V
ENRS6020S-6R8M	6.8	20	0.085	2.20	1.80	100 KHz / 1V
ENRS6020S-100M	10	20	0.120	1.75	1.40	100 KHz / 1V
ENRS6020S-150M	15	20	0.160	1.50	1.20	100 KHz / 1V
ENRS6020S-220M	22	20	0.240	1.25	1.00	100 KHz / 1V
ENRS6020S-270M	27	20	0.350	1.15	0.95	100 KHz / 1V
ENRS6020S-330M	33	20	0.400	1.10	0.90	100 KHz / 1V
ENRS6020S-470M	47	20	0.500	1.00	0.80	100 KHz / 1V

Electrical Characteristics (ENRS6028S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance ±30% (Ω)	Isat (A)	Irms (A)	Test Frequency
ENRS6028S-1R0N	1.0	30	0.012	6.70	4.60	100 KHz / 1V
ENRS6028S-1R5N	1.5	30	0.016	6.00	4.30	100 KHz / 1V
ENRS6028S-2R2N	2.2	30	0.020	5.10	3.75	100 KHz / 1V
ENRS6028S-3R3N	3.3	30	0.025	3.63	3.40	100 KHz / 1V
ENRS6028S-4R7N	4.7	30	0.033	3.00	3.00	100 KHz / 1V
ENRS6028S-5R6N	5.6	30	0.045	2.80	2.45	100 KHz / 1V
ENRS6028S-6R8M	6.8	20	0.056	2.60	2.40	100 KHz / 1V
ENRS6028S-8R2M	8.2	20	0.068	2.40	2.25	100 KHz / 1V
ENRS6028S-100M	10	20	0.078	2.05	1.90	100 KHz / 1V
ENRS6028S-120M	12	20	0.088	1.80	1.70	100 KHz / 1V
ENRS6028S-150M	15	20	0.125	1.75	1.50	100 KHz / 1V
ENRS6028S-180M	18	20	0.130	1.55	1.45	100 KHz / 1V
ENRS6028S-220M	22	20	0.140	1.45	1.40	100 KHz / 1V
ENRS6028S-270M	27	20	0.180	1.40	1.30	100 KHz / 1V
ENRS6028S-330M	33	20	0.220	1.35	1.10	100 KHz / 1V
ENRS6028S-390M	39	20	0.225	1.25	1.10	100 KHz / 1V
ENRS6028S-470M	47	20	0.280	1.15	1.05	100 KHz / 1V
ENRS6028S-680M	68	20	0.420	0.95	0.85	100 KHz / 1V
ENRS6028S-820M	82	20	0.550	0.80	0.70	100 KHz / 1V
ENRS6028S-101M	100	20	0.670	0.65	0.60	100 KHz / 1V

Wire Wound SMD Power Inductors / ENRS Series

Electrical Characteristics (ENRS6045S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance ±30% (Ω)	Isat (A)	Irms (A)	Test Frequency
ENRS6045S-R82N	0.82	30	0.008	10.40	5.90	100 KHz / 1V
ENRS6045S-1R0N	1.0	30	0.011	9.85	5.14	100 KHz / 1V
ENRS6045S-1R2N	1.2	30	0.010	8.35	5.40	100 KHz / 1V
ENRS6045S-1R5N	1.5	30	0.012	8.80	4.95	100 KHz / 1V
ENRS6045S-1R8N	1.8	30	0.012	7.60	4.95	100 KHz / 1V
ENRS6045S-2R2N	2.2	30	0.014	6.75	4.60	100 KHz / 1V
ENRS6045S-2R3N	2.3	30	0.014	6.00	3.50	100 KHz / 1V
ENRS6045S-2R7N	2.7	30	0.015	5.75	4.30	100 KHz / 1V
ENRS6045S-3R0N	3.0	30	0.020	5.60	3.80	100 KHz / 1V
ENRS6045S-3R3N	3.3	30	0.021	5.90	3.70	100 KHz / 1V
ENRS6045S-3R6N	3.6	30	0.021	5.25	3.70	100 KHz / 1V
ENRS6045S-4R3M	4.3	20	0.023	4.45	3.50	100 KHz / 1V
ENRS6045S-4R7M	4.7	20	0.026	4.97	3.30	100 KHz / 1V
ENRS6045S-5R1M	5.1	20	0.026	4.40	3.30	100 KHz / 1V
ENRS6045S-5R6M	5.6	20	0.029	4.15	3.15	100 KHz / 1V
ENRS6045S-6R2M	6.2	20	0.031	4.43	3.00	100 KHz / 1V
ENRS6045S-6R8M	6.8	20	0.031	3.90	3.00	100 KHz / 1V
ENRS6045S-7R5M	7.5	20	0.034	3.50	2.90	100 KHz / 1V
ENRS6045S-8R2M	8.2	20	0.043	3.90	2.60	100 KHz / 1V
ENRS6045S-9R1M	9.1	20	0.043	3.35	2.60	100 KHz / 1V
ENRS6045S-100M	10	20	0.048	3.20	2.45	100 KHz / 1V
ENRS6045S-120M	12	20	0.058	2.80	2.20	100 KHz / 1V
ENRS6045S-150M	15	20	0.068	2.50	2.05	100 KHz / 1V
ENRS6045S-180M	18	20	0.081	2.20	1.85	100 KHz / 1V
ENRS6045S-220M	22	20	0.089	2.05	1.80	100 KHz / 1V
ENRS6045S-270M	27	20	0.102	1.90	1.65	100 KHz / 1V
ENRS6045S-300M	30	20	0.132	1.70	1.50	100 KHz / 1V
ENRS6045S-330M	33	20	0.137	1.65	1.45	100 KHz / 1V
ENRS6045S-360M	36	20	0.173	1.62	1.40	100 KHz / 1V
ENRS6045S-390M	39	20	0.180	1.50	1.25	100 KHz / 1V
ENRS6045S-430M	43	20	0.200	1.63	1.20	100 KHz / 1V
ENRS6045S-470M	47	20	0.200	1.40	1.20	100 KHz / 1V
ENRS6045S-510M	51	20	0.207	1.35	1.15	100 KHz / 1V
ENRS6045S-560M	56	20	0.221	1.30	1.10	100 KHz / 1V
ENRS6045S-620M	62	20	0.235	1.25	1.10	100 KHz / 1V
ENRS6045S-680M	68	20	0.289	1.20	1.00	100 KHz / 1V
ENRS6045S-750M	75	20	0.305	1.15	0.95	100 KHz / 1V
ENRS6045S-820M	82	20	0.341	1.05	0.90	100 KHz / 1V
ENRS6045S-910M	91	20	0.359	1.00	0.85	100 KHz / 1V
ENRS6045S-101M	100	20	0.433	0.95	0.80	100 KHz / 1V
ENRS6045S-121M	120	20	0.484	0.85	0.77	100 KHz / 1V

Wire Wound SMD Power Inductors / ENRS Series

Electrical Characteristics (ENRS6045S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance ±30% (Ω)	Isat (A)	Irms (A)	Test Frequency
ENRS6045S-151M	150	20	0.580	0.80	0.70	100 KHz / 1V
ENRS6045S-221M	220	20	0.834	0.70	0.59	100 KHz / 1V
ENRS6045S-331M	330	20	1.270	0.57	0.57	100 KHz / 1V

Electrical Characteristics (ENRS8040S TYPE)

Part No.	Inductance (uH)	Tolerance (%)	DC Resistance ±30% (Ω)	Isat (A)	Irms (A)	Test Frequency
ENRS8040S-R56N	0.56	30	0.005	11.50	7.60	100 KHz / 1V
ENRS8040S-1R0N	1.0	30	0.008	9.85	6.30	100 KHz / 1V
ENRS8040S-1R5N	1.5	30	0.010	8.15	5.65	100 KHz / 1V
ENRS8040S-2R2N	2.2	30	0.012	7.10	5.15	100 KHz / 1V
ENRS8040S-3R3N	3.3	30	0.017	6.50	4.40	100 KHz / 1V
ENRS8040S-4R7N	4.7	30	0.020	5.90	4.00	100 KHz / 1V
ENRS8040S-5R6N	5.6	30	0.024	5.50	3.80	100 KHz / 1V
ENRS8040S-6R8M	6.8	20	0.028	4.55	3.60	100 KHz / 1V
ENRS8040S-8R2M	8.2	20	0.035	4.20	3.40	100 KHz / 1V
ENRS8040S-100M	10	20	0.037	3.60	3.10	100 KHz / 1V
ENRS8040S-150M	15	20	0.056	2.95	2.50	100 KHz / 1V
ENRS8040S-220M	22	20	0.074	2.40	2.00	100 KHz / 1V
ENRS8040S-330M	33	20	0.100	2.05	1.70	100 KHz / 1V
ENRS8040S-470M	47	20	0.158	1.75	1.50	100 KHz / 1V
ENRS8040S-680M	68	20	0.196	1.45	1.20	100 KHz / 1V
ENRS8040S-101M	100	20	0.295	1.15	1.00	100 KHz / 1V
ENRS8040S-151M	150	20	0.470	1.10	0.80	100 KHz / 1V
ENRS8040S-181M	180	20	0.610	0.90	0.75	100 KHz / 1V
ENRS8040S-221M	220	20	0.660	0.85	0.70	100 KHz / 1V
ENRS8040S-331M	330	20	0.970	0.68	0.55	100 KHz / 1V
ENRS8040S-471M	470	20	1.400	0.60	0.48	100 KHz / 1V

NOTE

1. All test data is referenced to 20°C ambient.
2. Rated current: Isat or Irms, whichever is smaller.
3. Isat: DC current at which the inductance drops approximate 30% from its value without current.
4. Irms: DC current that causes the temperature rise ($\Delta T = 40^\circ C$) from 20°C ambient.

Wire Wound SMD Power Inductors / ENRS Series

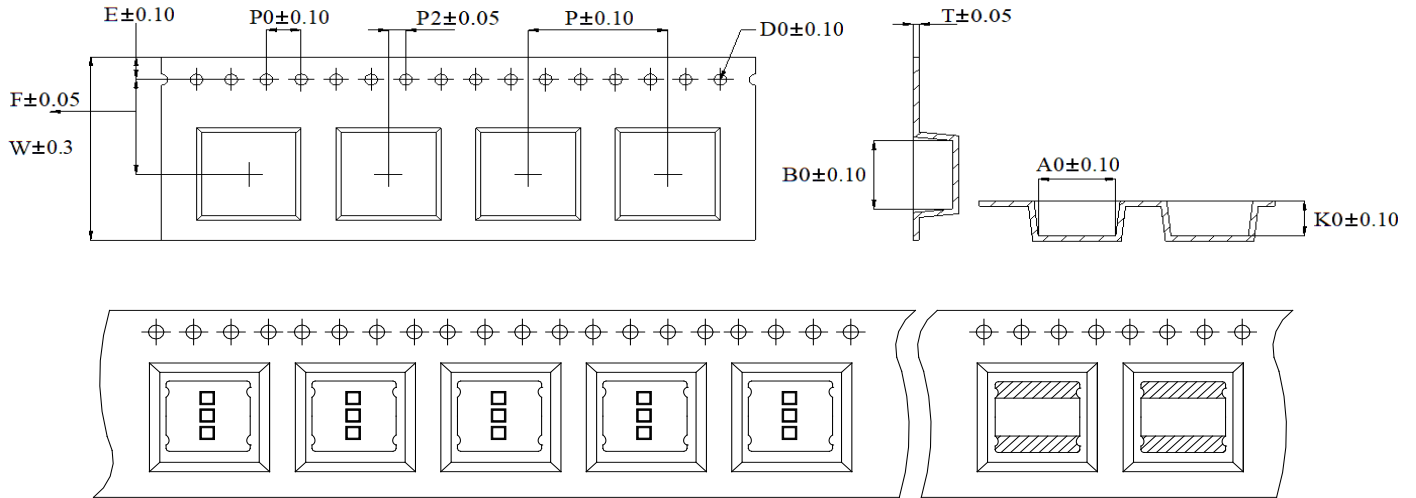
4. Reliability and Test Conditions(可靠性測試條件)

Item	Conditions	Specification
Temperature Cycling	Temperature (°C) : -55°C~125°C Cycle: 100	1. Electrical characterization change range ($\Delta L \pm 10\%$) 2. Appearance-No damage (OM)
Biased Humidity	Temperature (°C):40°C Humidity (%) : 90~95% Time (Hours) : 1000 hrs	1. Electrical characterization change range ($\Delta L \pm 10\%$) 2. Appearance-No damage (OM)
High Temperature Exposure□ (Storage)	Temperature (°C) : 125 °C Time (Hours) : 1000 hrs	1. Electrical characterization change range ($\Delta L \pm 10\%$) 2. Appearance-No damage (OM)
Low Temperature Exposure□ (Storage)	Temperature (°C) : -55°C Time (Hours) : 1000 hrs	1. Electrical characterization change range ($\Delta Z \pm 30\%$) 2. Appearance-No damage (OM)
Vibration	Axial (X, Y, Z) : 10~55 Hz Amplitude : 1.5mm Time (Hours) : 2 hrs	1. Electrical characterization change range ($\Delta L \pm 10\%$) 2. Appearance-No damage (OM)
Resistance to Soldering Heat	Peak temperature (°C) : 260°C Reflow times : 2 times	1. Electrical characterization change range ($\Delta L \pm 10\%$) 2. Appearance-No damage (OM)
Solderability	Solder temperature (°C): 245±3°C Immersion time (Sec): ≤ 3 s	All terminations shall exhibit a continuous solder coating free from defects for a minimum of 90% of the critical area of any individual termination. (10X magnification)

Wire Wound SMD Power Inductors / ENRS Series

1. Packing Specifications

1. Dimension for Carrier Tapes :



Tape and Reel Dimension(mm)

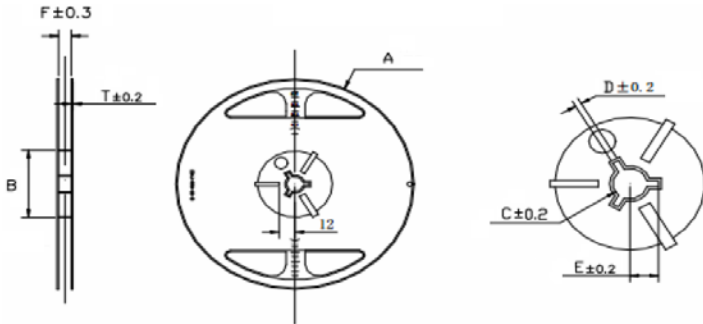
TYPE	W	A0	B0	K0	P	F	E	D0	P0	P2	T
ENRS252012S	8.00	2.35	2.65	1.4	4	3.50	1.75	1.50	4.00	2.00	0.25
ENRS3015S	8.00	3.30	3.30	1.70	4.00	3.50	1.75	1.50	4.00	2.00	0.20
ENRS4018S	12.00	4.35	4.35	1.95	8.00	5.50	1.75	1.50	4.00	2.00	0.25
ENRS4020S	12.00	4.35	4.35	2.25	8.00	5.50	1.75	1.50	4.00	2.00	0.30
ENRS4030S	12.00	4.35	4.35	3.20	8.00	5.50	1.75	1.50	4.00	2.00	0.30
ENRS5020S	12.00	5.20	5.20	2.30	8.00	5.50	1.75	1.50	4.00	2.00	0.40
ENRS5040S	12.00	5.30	5.30	4.30	8.00	5.50	1.75	1.50	4.00	2.00	0.40
ENRS6020S	16.00	6.30	6.30	2.20	8.00	7.50	1.75	1.50	4.00	2.00	0.40
ENRS6028S	16.00	6.40	6.40	3.30	8.00	7.50	1.75	1.50	4.00	2.00	0.40
ENRS6045S	16.00	6.30	6.30	4.70	8.00	7.50	1.75	1.50	4.00	2.00	0.40
ENRS8040S	16.00	8.40	8.40	4.20	12.00	7.50	1.75	1.50	4.00	2.00	0.35

Wire Wound SMD Power Inductors / ENRS Series

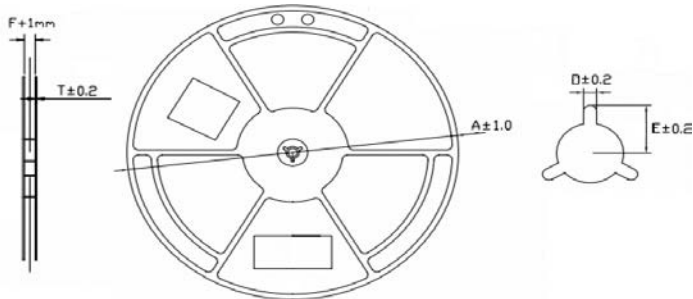
1. Packing Specifications

2. Packing(mm)

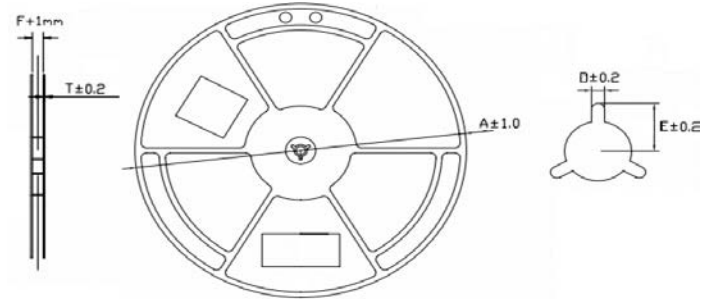
W8



W12



W16



TYPE	Reel Type	Reel	A	B	C	D	E	F	T
ENRS252012S	W8	2000	178	60	13.3	2.2	10.8	9	1.2
ENRS3015S	W8	2000	178	60	13.3	2.2	10.8	9	1.2
ENRS4018S	W12	3000	330	-	-	2.6	10.8	12.8	2.1
ENRS4020S	W12	3000	330	-	-	2.6	10.8	12.8	2.1
ENRS4030S	W12	2000	330	-	-	2.6	10.8	12.8	2.1
ENRS5020S	W12	3000	330	-	-	2.6	10.8	12.8	2.1
ENRS5040S	W12	1500	330	-	-	2.6	10.8	12.8	2.1
ENRS6020S	W16	3000	330	-	-	2.6	10.8	16.8	2.1
ENRS6028S	W16	2000	330	-	-	2.6	10.8	16.8	2.1
ENRS6045S	W16	1500	330	-	-	2.6	10.8	16.8	2.1
ENRS8040S	W16	1000	330	-	-	2.6	10.8	16.8	2.1