

■ FEATURES

- SMD Power Inductor (SNR Series)
- low profile, low RDC, high current handling capacities
- Magnetically shielded structure that ensures the high-density mounting configurations
- Flat bottom surface ensures secure, reliable mounting
- Provided in embossed carriage tape packaging for use with automatic mounting machines.

■ APPLICATIONS

Ideally used in mobile phones, PDA, DSC, DC-DC converters, etc.

■ PRODUCT IDENTIFICATION

SNR - 201610 - 1R0 I

① ② ③ ④

1. Series name
2. Product dimensions: (201610=2.0*1.6*1.0 mm)
3. Inductance value: (R68= 0.68uH 1R0=1.0uH 100=10uH)
4. Inductance tolerance: (M=20 %; T=30 %)

■ SHAPES & DIMENSIONS

Fig1

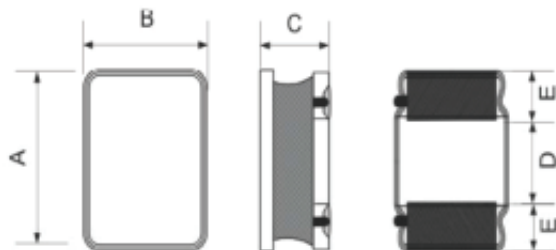
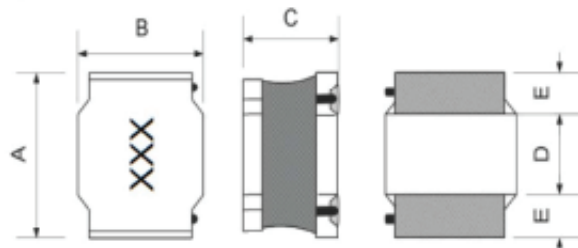
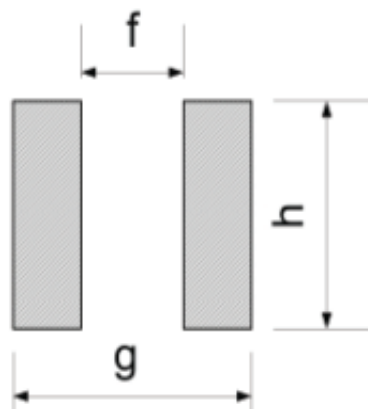


Fig2



Series	Dimensions (mm)					Shape
	A	B	C Max.	D Ref.	E Ref.	
201620	2.0±0.2	1.6±0.2	1.0	0.6	0.60	Fig. 1
252010	2.5±0.2	2.0±0.2	1.0	0.8	0.80	Fig. 1
252012	2.5±0.2	2.0±0.2	1.2	0.8	8.00	Fig. 2
3010	3.0±0.2	3.0±0.2	1.0	1.5	0.75	Fig. 2
3012	3.0±0.2	3.0±0.2	1.2	1.5	0.75	Fig. 2
3015	3.0±0.2	3.0±0.2	1.5	1.5	0.75	Fig. 2
4012	4.0±0.2	4.0±0.2	1.2	2.1	0.95	Fig. 2
4018	4.0±0.2	4.0±0.2	1.8	2.1	0.95	Fig. 2
4030	4.0±0.2	4.0±0.2	3.0	2.1	0.95	Fig. 2
5020	5.0±0.2	5.0±0.2	2.0	2.5	1.25	Fig. 2
5040	5.0±0.2	5.0±0.2	4.0	2.5	1.25	Fig. 2
6028	6.0±0.2	6.0±0.2	2.8	2.9	1.55	Fig. 2
6045	6.0±0.2	6.0±0.2	4.5	2.9	1.55	Fig. 2
8040	8.0±0.2	8.0±0.2	4.2	4.0	2.00	Fig. 2

RECOMMENDED FOOTPRINT



Series	Dimensions (mm)		
	f Ref.	g Ref.	h Ref.
2016	0.8	2.2	1.6
2520	0.8	2.5	2.0
30	1.5	3.1	2.7
40	1.9	4.1	3.7
50	2.3	5.1	4.2
60	2.8	6.2	5.7
80	3.8	7.5	7.4

ELECTRICAL CHARACTERISTICS

SNR-201610 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) Max.	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-201610-1R0T	1.0	30	0.22	1.26	1.44
SNR-201610-1RST	1.5	30	0.34	0.99	1.26
SNR-201610-2R2T	2.2	30	0.42	0.90	1.08
SNR-201610-3R3M	3.3	20	0.66	0.74	0.81
SNR-201610-4R7M	4.7	20	0.87	0.61	0.72
SNR-201610-5R6M	5.6	20	0.94	0.58	0.72
SNR-201610-6R8M	6.8	20	1.26	0.51	0.63
SNR-201610-100M	10.0	20	1.88	0.42	0.52
SNR-201610-120M	12.0	20	2.15	0.38	0.38
SNR-201610-220M	22.0	20	3.77	0.28	0.36

SNR-252010 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-252010-1R0T	1.0	30	0.108	1.85	1.65
SNR-252010-1R5T	1.5	30	0.182	1.80	1.30
SNR-252010-2R2T	2.2	30	0.209	1.20	1.20
SNR-252010-3R3M	3.3	20	0.328	1.05	0.90
SNR-252010-4R7M	4.7	20	0.563	0.95	0.73
SNR-252010-5R6M	5.6	20	0.622	0.80	0.70
SNR-252010-6R8M	6.8	20	0.896	0.78	0.59
SNR-252010-100M	10.0	20	0.910	0.65	0.50
SNR-252010-150M	15.0	20	1.450	0.47	0.43
SNR-252010-220M	22.0	20	1.839	0.45	0.41

■ ELECTRICAL CHARACTERISTICS

SNR-252012 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-252012-1R0T	1.0	30	0.090	2.59	1.93
SNR-252012-1R5T	1.5	30	0.147	2.24	1.40
SNR-252012-2R2T	2.2	30	0.216	1.85	1.15
SNR-252012-3R3M	3.3	20	0.264	1.61	1.04
SNR-252012-4R7M	4.7	20	0.377	1.12	0.84
SNR-252012-5R6M	5.6	20	0.538	1.11	0.73
SNR-252012-6R8M	6.8	20	0.581	0.98	0.69
SNR-252012-100M	10.0	20	0.690	0.79	0.62
SNR-252012-220M	22.0	20	1.976	0.53	0.38

SNR-3010 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-3010-1R0T	1.0	30	0.065	1.40	1.45
SNR-3010-1R5T	1.5	30	0.080	1.27	1.30
SNR-3010-2R2T	2.2	30	0.110	1.15	1.09
SNR-3010-3R3M	3.3	20	0.145	0.97	0.96
SNR-3010-4R7M	4.7	20	0.225	0.75	0.77
SNR-3010-6R8M	5.6	20	0.305	0.55	0.66
SNR-3010-8R2M	6.8	20	0.400	0.55	0.58
SNR-3010-100M	10.0	20	0.400	0.55	0.58
SNR-3010-150M	15.0	20	0.610	0.42	0.47
SNR-3010-220M	22.0	20	0.930	0.35	0.38

SNR-3012 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-3010-1R0T	1.0	30	0.040	1.87	2.20
SNR-3010-1R5T	1.5	30	0.045	1.62	2.01
SNR-3010-2R2T	2.2	30	0.075	1.20	1.55
SNR-3010-3R3M	3.3	20	0.100	1.05	1.36
SNR-3010-4R7M	4.7	20	0.120	0.90	1.24
SNR-3010-6R8M	5.6	20	0.190	0.75	0.98
SNR-3010-100M	10.0	20	0.265	0.60	0.83
SNR-3010-150M	15.0	20	0.360	0.45	0.71
SNR-3010-220M	22.0	20	0.645	0.42	0.53

■ ELECTRICAL CHARACTERISTICS

SNR-3015 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-3015-1R0T	1.0	30	0.030	2.32	2.35
SNR-3015-1R5T	0.2	30	0.050	2.30	1.70
SNR-3015-2R2T	2.2	30	0.060	1.60	1.60
SNR-3015-3R3M	3.3	20	0.080	1.32	1.36
SNR-3015-4R7M	4.7	20	0.125	1.10	1.09
SNR-3015-5R6M	5.6	20	0.168	0.93	0.92
SNR-3015-6R8M	6.8	20	0.200	0.85	0.85
SNR-3015-100M	10.0	20	0.250	0.72	0.77
SNR-3015-150M	15.0	20	0.350	0.66	0.65
SNR-3015-220M	22.0	20	0.460	0.52	0.57
SNR-3015-330M	33.0	20	0.820	0.44	0.43
SNR-3015-470M	47.0	20	1.250	0.35	0.35
SNR-3015-680M	68.0	20	2.700	0.28	0.23
SNR-3015-101M	100.0	20	3.110	0.23	0.21

SNR-4012 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-4012-1R0T	1.0	30	0.050	2.61	1.65
SNR-4012-1R5T	1.5	30	0.065	2.10	1.46
SNR-4012-2R2T	2.2	30	0.080	1.76	1.32
SNR-4012-3R3M	3.3	20	0.110	1.72	1.12
SNR-4012-4R7M	4.7	20	0.125	1.15	1.05
SNR-4012-5R6M	5.6	20	0.140	1.00	1.00
SNR-4012-6R8M	6.8	20	0.198	0.85	0.84
SNR-4012-100M	10.0	20	0.265	0.80	0.77
SNR-4012-150M	15.0	20	0.340	0.56	0.64
SNR-4012-220M	22.0	20	0.597	0.46	0.49
SNR-4012-330M	33.0	20	0.810	0.42	0.42
SNR-4012-470M	47.0	20	1.100	0.35	0.37

■ ELECTRICAL CHARACTERISTICS

SNR-4018 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-4018-1R0T	1.0	30	0.025	4.80	2.00
SNR-4018-1R5T	1.5	30	0.030	3.35	1.80
SNR-4018-2R2T	2.2	30	0.045	2.70	1.65
SNR-4018-3R3M	3.3	20	0.070	2.45	1.23
SNR-4018-4R7M	4.7	20	0.090	1.70	1.20
SNR-4018-6R8M	6.8	20	0.110	1.45	1.06
SNR-4018-100M	10.0	20	0.180	0.33	0.84
SNR-4018-150M	15.0	20	0.250	0.94	0.65
SNR-4018-220M	22.0	20	0.360	0.80	0.59
SNR-4018-330M	33.0	20	0.530	0.56	0.49
SNR-4018-470M	47.0	20	0.650	0.57	0.42
SNR-4018-680M	68.0	20	1.000	0.47	0.32
SNR-4018-101M	100.0	20	1.750	0.40	0.25

SNR-4030 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-4030-1R0T	1.0	30	0.014	5.26	4.15
SNR-4030-1R5T	1.5	30	0.020	4.84	3.34
SNR-4030-2R2T	2.2	30	0.030	4.90	2.95
SNR-4030-3R3M	3.3	20	0.040	3.30	2.40
SNR-4030-4R7M	4.7	20	0.060	2.90	2.00
SNR-4030-5R6M	5.6	20	0.065	2.60	1.95
SNR-4030-6R8M	6.8	20	0.090	2.75	1.60
SNR-4030-100M	6.8	20	0.090	2.75	1.60
SNR-4030-120M	10.0	20	0.100	1.95	1.50
SNR-4030-150M	12.0	20	0.135	1.70	1.30
SNR-4030-180M	15.0	20	0.190	1.65	1.11
SNR-4030-220M	18.0	20	0.200	1.40	1.10
SNR-4030-330M	22.0	20	0.225	1.30	1.00
SNR-4030-470M	33.0	20	0.330	1.10	0.84
SNR-4030-470M	47.0	20	0.445	0.95	0.72
SNR-4030-560M	56.0	20	0.555	0.85	0.65
SNR-4030-680M	68.0	20	0.868	0.72	0.52
SNR-4030-820M	82.0	20	1.060	0.66	0.47
SNR-4030-101M	100.0	20	1.150	0.60	0.45
SNR-4030-121M	120.0	20	1.350	0.55	0.42
SNR-4030-151M	150.0	20	1.800	0.50	0.35
SNR-4030-221M	175.0	29	2.500	0.40	0.30

■ ELECTRICAL CHARACTERISTICS

SNR-5020 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-5020-R68T	0.68	30	0.017	5.50	4.00
SNR-5020-1R0T	1.0	30	0.020	4.10	3.80
SNR-5020-1R5T	1.5	30	0.026	4.10	3.20
SNR-5020-2R2T	2.2	30	0.032	3.20	2.90
SNR-5020-3R3M	3.3	20	0.043	2.55	2.50
SNR-5020-4R7M	4.7	20	0.057	2.50	2.20
SNR-5020-5R6M	5.6	20	0.064	2.30	2.05
SNR-5020-6R8M	6.8	20	0.083	2.05	1.80
SNR-5020-8R2M	6.8	20	0.098	1.85	1.65
SNR-5020-100M	10.0	20	0.110	1.70	1.55
SNR-5020-120M	12.0	20	0.140	1.50	1.40
SNR-5020-150M	15.0	20	0.165	1.00	1.11
SNR-5020-180M	18.0	20	0.200	1.35	1.25
SNR-5020-220M	22.0	20	0.226	1.15	1.10
SNR-5020-330M	33.0	20	0.390	0.92	0.90
SNR-5020-470M	47.0	20	0.523	0.77	0.77
SNR-5020-560M	56.0	20	0.630	0.77	0.70
SNR-5020-680M	68.0	20	0.740	0.65	0.64
SNR-5020-820M	82.0	20	0.965	0.65	0.50
SNR-5020-101M	100.0	20	1.100	0.53	0.53
SNR-5020-121M	120.0	20	1.350	0.42	0.40

SNR-5040 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-5040-1R0T	1.0	30	0.012	7.35	4.90
SNR-5040-1R5T	1.5	30	0.015	6.30	4.30
SNR-5040-2R2T	2.2	30	0.019	4.90	3.80
SNR-5040-3R3M	3.3	20	0.024	3.95	3.40
SNR-5040-4R7M	4.7	20	0.030	3.50	3.00
SNR-5040-5R6M	5.6	20	0.035	3.00	2.80
SNR-5040-6R8M	6.8	20	0.043	2.90	2.50
SNR-5040-8R2M	6.8	20	0.048	2.70	2.30
SNR-5040-100M	10.0	20	0.064	0.06	2.10
SNR-5040-150M	15.0	20	0.086	2.00	2.00
SNR-5040-220M	22.0	20	0.129	1.60	1.50
SNR-5040-330M	33.0	20	0.188	0.33	1.20
SNR-5040-470M	47.0	20	0.272	1.10	1.00
SNR-5040-560M	68.0	20	0.400	0.90	0.80
SNR-5040-680M	100.0	20	0.560	0.75	0.70
SNR-5040-880M	150.0	20	0.750	0.65	0.60

■ ELECTRICAL CHARACTERISTICS

SNR-6028 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-6028-R82T	0.82	30	0.010	6.50	5.20
SNR-6028-1R0T	1.0	30	0.011	5.75	5.20
SNR-6028-1R5T	1.5	30	0.013	6.00	4.58
SNR-6028-2R2T	2.2	30	0.020	5.10	3.75
SNR-6028-3R3M	3.3	20	0.025	4.15	3.48
SNR-6028-4R7M	4.7	20	0.030	3.00	3.08
SNR-6028-5R6M	5.6	20	0.045	3.20	2.50
SNR-6028-6R8M	6.8	20	0.047	2.60	2.40
SNR-6028-8R2M	8.2	20	0.055	2.30	2.25
SNR-6028-100M	10.0	20	0.072	2.04	1.95
SNR-6028-120M	12.0	20	0.080	1.80	1.85
SNR-6028-150M	15.0	20	0.125	1.75	1.45
SNR-6028-180M	18.0	20	0.126	1.52	1.42
SNR-6028-220M	22.0	20	0.140	1.45	1.40
SNR-6028-330M	33.0	20	0.185	1.35	1.22
SNR-6028-470M	47.0	20	0.315	1.15	1.06
SNR-6028-560M	56.0	20	0.345	1.05	0.89
SNR-6028-680M	68.0	20	0.360	0.80	0.86
SNR-6028-820M	82.0	20	0.500	0.80	0.70
SNR-6028-101M	100.0	20	0.500	0.65	0.68

■ ELECTRICAL CHARACTERISTICS

SNR-6045 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-6045-R47T	0.47	30	0.006	15.00	6.50
SNR-6045-R56T	0.56	30	0.006	15.00	6.50
SNR-6045-R68T	0.68	30	0.006	11.00	5.70
SNR-6045-R82T	0.82	30	0.008	10.35	5.60
SNR-6045-1R0T	1.0	30	0.011	9.85	5.14
SNR-6045-1R2T	1.2	30	0.011	8.35	5.40
SNR-6045-1R5T	1.5	30	0.012	8.80	4.95
SNR-6045-1R8T	1.8	30	0.012	7.60	4.95
SNR-6045-2R2T	2.2	30	0.014	6.75	4.60
SNR-6045-2R7T	2.7	30	0.015	5.75	4.30
SNR-6045-3R3M	3.3	20	0.021	5.90	3.70
SNR-6045-3R6M	3.6	20	0.021	5.25	3.60
SNR-6045-4R3M	4.3	20	0.023	4.45	3.50
SNR-6045-4R7M	4.7	20	0.026	4.97	3.30
SNR-6045-5R1M	5.1	20	0.026	4.40	3.20
SNR-6045-5R6M	5.6	20	0.029	4.15	3.15
SNR-6045-6R2M	6.2	20	0.031	4.43	3.00
SNR-6045-6R8M	6.8	20	0.031	3.90	3.00
SNR-6045-8R2M	8.2	20	0.043	3.90	2.60
SNR-6045-100M	10.0	20	0.048	3.20	2.45
SNR-6045-120M	12.0	20	0.058	2.80	2.20
SNR-6045-150M	15.0	20	0.068	2.50	2.05
SNR-6045-180M	18.0	20	0.081	2.20	1.85
SNR-6045-220M	22.0	20	0.089	2.05	1.80
SNR-6045-270M	27.0	20	0.102	1.90	1.65
SNR-6045-330M	33.0	20	0.137	1.65	1.45
SNR-6045-390M	39.0	20	0.180	1.50	1.25
SNR-6045-470M	47.0	20	0.200	1.40	1.20
SNR-6045-560M	56.0	20	0.221	1.30	1.10
SNR-6045-620M	62.0	20	0.235	1.25	1.10
SNR-6045-680M	68.0	20	0.289	1.20	1.00
SNR-6045-820M	82.0	20	0.341	1.05	0.90
SNR-6045-101M	100.0	20	0.433	0.95	0.80
SNR-6045-121M	120.0	20	0.484	0.85	0.77
SNR-6045-151M	150.0	20	0.580	0.80	0.70
SNR-6045-221M	220.0	20	0.834	0.70	0.59
SNR-6045-331M	330.0	20	1.270	0.57	0.57
SNR-6045-471M	470.0	20	1.800	0.42	0.42
SNR-6045-681M	680.0	20	2.500	0.33	0.33

■ ELECTRICAL CHARACTERISTICS

SNR-8040 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-8040-R82T	0.82	30	0.008	13.80	6.30
SNR-8040-1R0T	1.0	30	0.008	10.00	6.30
SNR-8040-1R2T	1.2	30	0.010	9.85	5.65
SNR-8040-1R5T	1.5	30	0.010	8.15	5.65
SNR-8040-2R0T	2.0	30	0.012	8.00	5.20
SNR-8040-2R2T	2.2	30	0.912	7.10	5.15
SNR-8040-3R0T	3.0	30	0.014	6.10	4.70
SNR-8040-3R3M	3.3	20	0.017	6.10	4.40
SNR-8040-3R6M	3.6	20	0.017	6.10	4.35
SNR-8040-3R9M	3.9	20	0.017	5.75	4.35
SNR-8040-4R7M	0.6	20	0.019	5.70	4.10
SNR-8040-5R1M	5.1	20	0.019	4.70	4.05
SNR-8040-5R6M	5.6	20	0.021	4.60	3.85
SNR-8040-6R2M	6.2	20	0.021	4.45	3.85
SNR-8040-6R8M	6.8	20	0.024	1.00	3.60
SNR-8040-8R2M	8.2	20	0.026	2.00	3.45
SNR-8040-100M	10.0	20	0.029	3.60	3.30
SNR-8040-120M	12.0	20	0.041	3.50	2.80
SNR-8040-150M	15.0	20	0.047	0.02	2.60
SNR-8040-180M	18.0	20	0.053	2.70	2.40
SNR-8040-220M	22.0	20	0.069	2.40	2.10
SNR-8040-270M	27.0	20	0.078	2.15	2.00
SNR-8040-330M	33.0	20	0.097	2.05	1.80
SNR-8040-390M	39.0	20	0.107	1.95	1.70
SNR-8040-430M	43.0	20	0.113	1.90	1.65
SNR-8040-470M	47.0	20	0.136	1.75	1.55
SNR-8040-560M	56.0	20	0.148	1.55	1.45
SNR-8040-620M	62.0	20	0.182	1.50	1.30
SNR-8040-680M	68.0	20	0.196	1.45	1.25
SNR-8040-820M	82.0	20	0.225	1.30	1.15
SNR-8040-101M	100.0	20	0.290	1.15	1.00
SNR-8040-121M	120.0	20	0.334	1.05	0.95
SNR-8040-151M	150.0	20	0.410	1.00	0.85
SNR-8040-181M	180.0	20	0.520	0.90	0.70
SNR-8040-221M	220.0	20	0.599	0.85	0.80
SNR-8040-331M	330.0	20	0.889	0.68	0.64
SNR-8040-471M	470.0	20	1.260	0.60	0.54
SNR-8040-681M	680.0	20	2.040	0.50	0.45
SNR-8040-102M	1000.0	20	2.800	0.40	0.35