



SMD Power chokes-SGRH -R Series

SGRH -R series chokes For High Energy Storage & Lower Power losses Use

Features

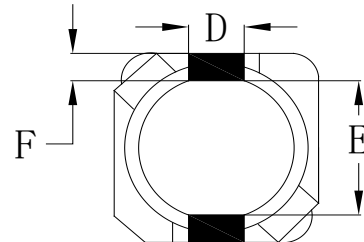
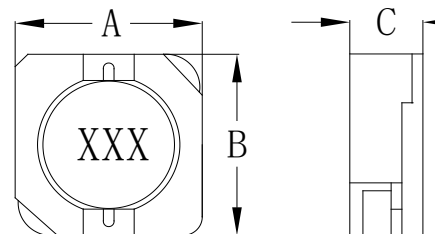
1. Available in magnetically shielded.
2. Low DC resistance.
3. Suitable for large currents.
4. Ideal for a variety of DC - DC converter inductor applications.
5. Available on tape and reel for auto surface mounting.



Applications

Power supply for VTRs, OA equipment.
 LCD televisions, Notebook PCs.
 Portable communication equipment.
 DC / DC converters, etc.

Dimensions (mm)



Product Identification

SGRH 104R- 1R2 M -PF

SGRH: SERIES NAME

104: DIMENSION SIZE CODE

R: CORE TYPE

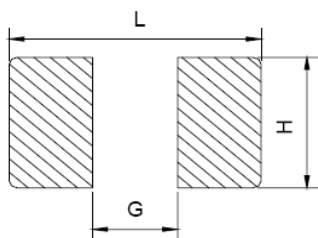
1R2: INDUCTANCE CODE.

M: TOLERANCE, K=10% M=20%.±30%(N)

PF: Pb-Free

SERIES	A	B	C	D	E	F
SGRH103R	10.3Max	10.7Max	3.1Max	3.0±0.2	8.0±0.3	1.2±0.2
SGRH1035R	10.3Max	10.7Max	3.5Max	3.0±0.2	8.0±0.3	1.2±0.2
SGRH104R	10.3Max	10.7Max	4.0Max	3.0±0.2	8.0±0.3	1.2±0.2
SGRH105R	10.3Max	10.7Max	5.1Max	3.0±0.2	8.0±0.3	1.2±0.2

RECOMMENDER P.C.B LAYOUT



SERIES	L	H	G
SGRH103R	10.7	3.2	7.3
SGRH1035R	10.7	3.2	7.3
SGRH104R	10.7	3.2	7.3
SGRH105R	10.7	3.2	7.3


SMD POWER CHOKE-SGRH Series
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (KHz)	DC Resistance (ΩMax)	Rated current (A)Max	Itemp (A)Max
SGRH103R-100□-PF	10	100	0.058	2.70	2.75
SGRH103R-120□-PF	12	100	0.072	2.25	2.48
SGRH103R-150□-PF	15	100	0.086	2.22	2.24
SGRH103R-18□-PF	18	100	0.116	1.90	2.00
SGRH103R-220□-PF	22	100	0.145	1.78	1.8
SGRH103R-270□-PF	27	100	0.175	1.63	1.62
SGRH103R-330□-PF	33	100	0.213	1.45	1.46
SGRH103R-390□-PF	39	100	0.268	1.32	1.32
SGRH103R-470□-PF	47	100	0.298	1.18	1.3
SGRH103R-560□-PF	56	100	0.335	1.10	1.08
SGRH103R-680□-PF	68	100	0.451	1.04	1.00
SGRH103R-820□-PF	82	100	0.513	0.94	0.98
SGRH103R-101□-PF	100	100	0.700	0.84	0.92
SGRH103R-121□-PF	120	100	0.765	0.76	0.88
SGRH103R-151□-PF	150	100	0.876	0.70	0.73

Note:

- (1). All test data is referenced to 25°C ambient.
- (2). Operating Temperature Range-55°C to +105°C.
- (3). DC current(A)that will cause an approximateΔT of 40°C.
- (4). DC current(A)that will cause Lo to drop approximately 35%.
- (5). □Tolerance of inductance±10%(K) ±20%(M) ±30%(N)


SMD POWER CHOKE-SGRH Series
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (KHz)	DC Resistance (ΩMax)	Rated current (A)Max	Itemp (A)Max
SGRH1035R-1R5□-PF	1.5	100	0.010	8.10	7.69
SGRH1035R-2R2□-PF	2.2	100	0.015	8.00	7.60
SGRH1035R-3R3□-PF	3.3	100	0.020	7.00	7.00
SGRH1035R-4R7□-PF	4.7	100	0.030	4.10	4.10
SGRH1035R-5R6□-PF	5.6	100	0.033	4.00	4.00
SGRH1035R-6R8□-PF	6.8	100	0.041	3.80	3.80
SGRH1035R-100□-PF	10	100	0.069	3.40	3.00
SGRH1035R-120□-PF	12	100	0.082	3.20	2.85
SGRH1035R-150□-PF	15	100	0.094	2.70	2.70
SGRH1035R-180□-PF	18	100	0.104	2.60	2.40
SGRH1035R-220□-PF	22	100	0.119	2.56	2.20
SGRH1035R-270□-PF	27	100	0.137	2.00	1.80
SGRH1035R-330□-PF	33	100	0.162	1.90	1.70
SGRH1035R-390□-PF	39	100	0.184	1.60	1.60
SGRH1035R-470□-PF	47	100	0.218	1.40	1.52
SGRH1035R-560□-PF	56	100	0.248	1.35	1.35
SGRH1035R-680□-PF	68	100	0.268	1.30	1.30
SGRH1035R-820□-PF	82	100	0.337	1.28	1.28
SGRH1035R-101□-PF	100	100	0.450	1.20	1.08
SGRH1035R-121□-PF	120	100	0.504	1.10	1.00
SGRH1035R-151□-PF	150	100	0.637	0.90	0.81
SGRH1035R-181□-PF	180	100	0.760	0.85	0.77
SGRH1035R-221□-PF	220	100	0.880	0.70	0.73
SGRH1035R-271□-PF	270	100	1.190	0.65	0.60
SGRH1035R-331□-PF	330	100	1.480	0.60	0.51
SGRH1035R-391□-PF	390	100	1.790	0.58	0.45
SGRH1035R-471□-PF	470	100	2.220	0.50	0.40

Note:

- (1). All test data is referenced to 25°C ambient.
- (2). Operating Temperature Range -55°C to +105°C.
- (3). DC current(A) that will cause an approximate ΔT of 40°C.
- (4). DC current(A) that will cause L_o to drop approximately 35%.
- (5). □ Tolerance of inductance $\pm 10\%$ (K) $\pm 20\%$ (M) $\pm 30\%$ (N)


SMD POWER CHOKE-SGRH Series
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (KHz)	DC Resistance (ΩMax)	Rated current (A)Max	Itemp (A)Max
SGRH104R-1R0□-PF	1.0	100	0.008	10.10	9.00
SGRH104R-1R5□-PF	1.5	100	0.009	10.00	9.00
SGRH104R-2R5□-PF	2.5	100	0.01	7.50	7.50
SGRH104R-3R3□-PF	3.3	100	0.015	7.00	6.70
SGRH104R-3R8□-PF	3.8	100	0.017	6.00	6.00
SGRH104R-4R7□-PF	4.7	100	0.022	5.80	5.40
SGRH104R-5R2□-PF	5.2	100	0.023	5.70	5.10
SGRH104R-5R8□-PF	5.8	100	0.025	5.50	4.84
SGRH104R-7R0□-PF	7	100	0.027	4.80	4.59
SGRH104R-100□-PF	10	100	0.035	4.40	4.36
SGRH104R-150□-PF	15	100	0.05	3.60	3.10
SGRH104R-220□-PF	22	100	0.073	2.90	2.70
SGRH104R-330□-PF	33	100	0.117	2.30	2.10
SGRH104R-470□-PF	47	100	0.128	2.10	1.90
SGRH104R-680□-PF	68	100	0.265	1.50	1.42
SGRH104R-101□-PF	100	100	0.304	1.35	1.25
SGRH104R-151□-PF	150	100	0.506	1.15	0.93
SGRH104R-221□-PF	220	100	0.756	0.92	0.70
SGRH104R-331□-PF	330	100	1.09	0.70	0.63

Note:

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SMD POWER CHOKE-SGRH Series
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (KHz)	DC Resistance (ΩMax)	Rated current (A)Max	Itemp (A)Max
SGRH105R-100□-PF	10	100	0.026	3.45	4.50
SGRH105R-120□-PF	12	100	0.033	3.40	4.27
SGRH105R-150□-PF	15	100	0.041	2.83	4.00
SGRH105R-180□-PF	18	100	0.046	2.62	3.80
SGRH105R-220□-PF	22	100	0.061	2.44	3.40
SGRH105R-270□-PF	27	100	0.069	2.24	3.00
SGRH105R-330□-PF	33	100	0.085	1.88	2.70
SGRH105R-390□-PF	39	100	0.11	1.70	2.43
SGRH105R-470□-PF	47	100	0.13	1.56	2.10
SGRH105R-560□-PF	56	100	0.15	1.39	1.90
SGRH105R-680□-PF	68	100	0.21	1.36	1.65
SGRH105R-820□-PF	82	100	0.23	1.20	1.50
SGRH105R-101□-PF	100	100	0.26	1.09	1.42
SGRH105R-121□-PF	120	100	0.31	1.00	1.34
SGRH105R-151□-PF	150	100	0.37	0.91	1.27
SGRH105R-181□-PF	180	100	0.42	0.84	1.20
SGRH105R-221□-PF	220	100	0.5	0.75	1.08
SGRH105R-271□-PF	270	100	0.67	0.68	0.97
SGRH105R-331□-PF	330	100	0.82	0.60	0.87
SGRH105R-391□-PF	390	100	0.96	0.57	0.78
SGRH105R-471□-PF	470	100	1.28	0.50	0.70
SGRH105R-561□-PF	560	100	1.43	0.47	0.63
SGRH105R-681□-PF	680	100	1.6	0.43	0.56
SGRH105R-821□-PF	820	100	1.75	0.39	0.50
SGRH105R-102□-PF	1000	100	1.99	0.35	0.45

Note:

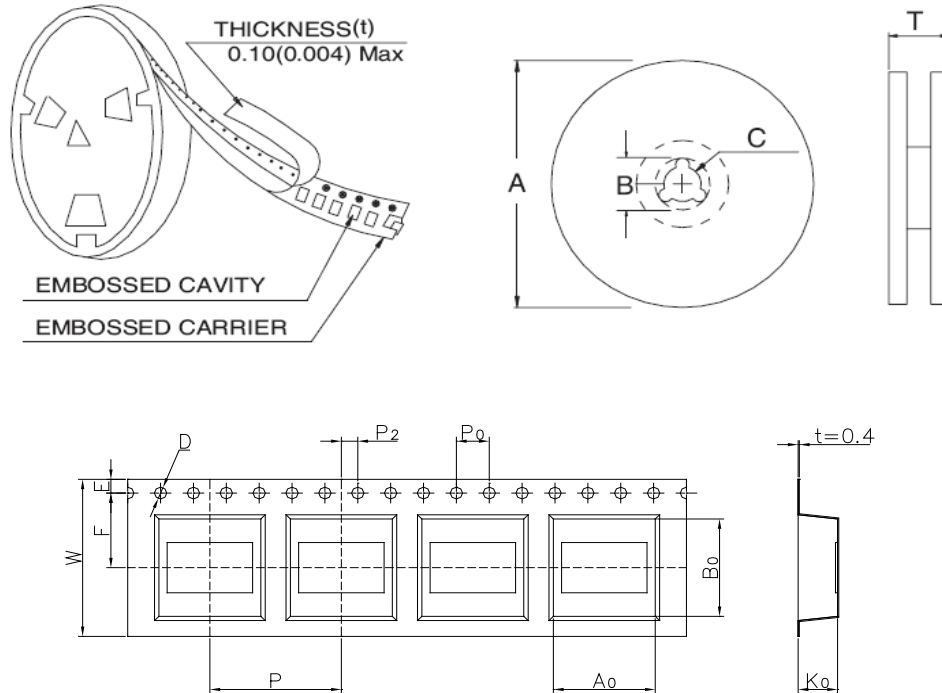
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SMD POWER CHOKE-SGRH Series

PACKAGING

1. Configuration.



2. Dimension in mm

TYPE	A	B	C	T
12mm	330	100	21±0.8	16.4
16mm	330	100	21±0.8	20.4
24mm	330	100	21±0.8	28.4
32mm	330	100	21±0.8	36.4

TYPE	Ao(mm)	Bo(mm)	Ko(mm)	W(mm)	P(mm)	PCS/REEL
SGRH103R	11.0±0.1	10.9±0.1	3.2±0.1	24±0.3	16±0.1	1000
SGRH1035R	11.0±0.1	10.9±0.1	3.6±0.1	24±0.3	16±0.1	1000
SGRH104R	11.0±0.1	10.9±0.1	4.2±0.1	24±0.3	16±0.1	800
SGRH105R	11.0±0.1	10.9±0.1	5.2±0.1	24±0.3	16±0.1	500