

GSHM Series

● Features

- RoHS compliant.
- Super low resistance, ultra high current rating.
- High performance (I sat) realized by metal dust core.
- Frequency Range: up to 1MHz.

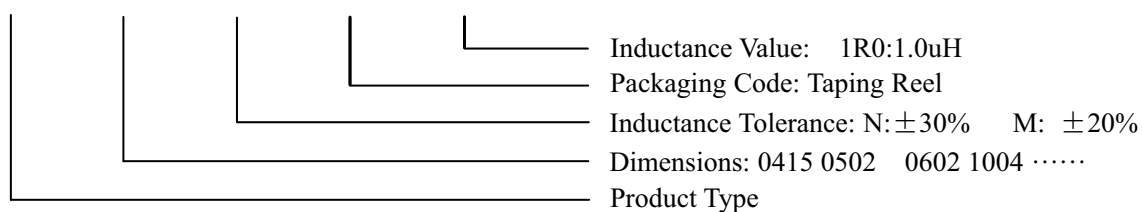
● Applications

- PDA, notebook, desktop, and server applications.
- Low profile, high current power supplies.
- Battery powered devices.
- DC/DC converters in distributed power systems.
- DC/DC converters for field programmable gate array.

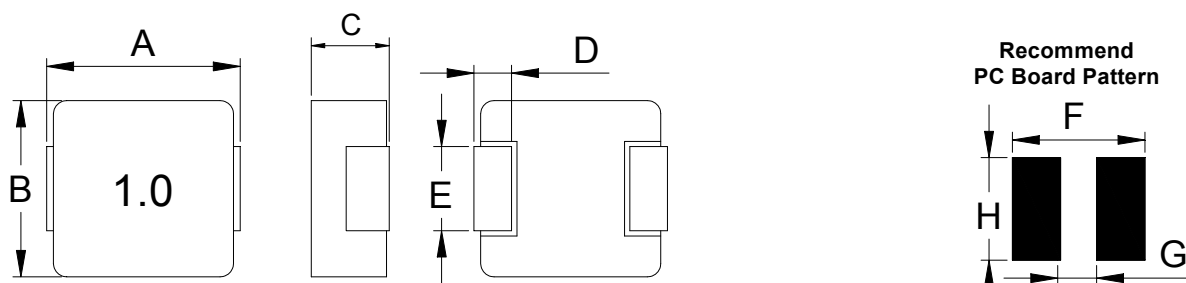
● Operating temperature: -55 °C to +125 °C

● Part Numbering

GSHM 0402 M T 1R0

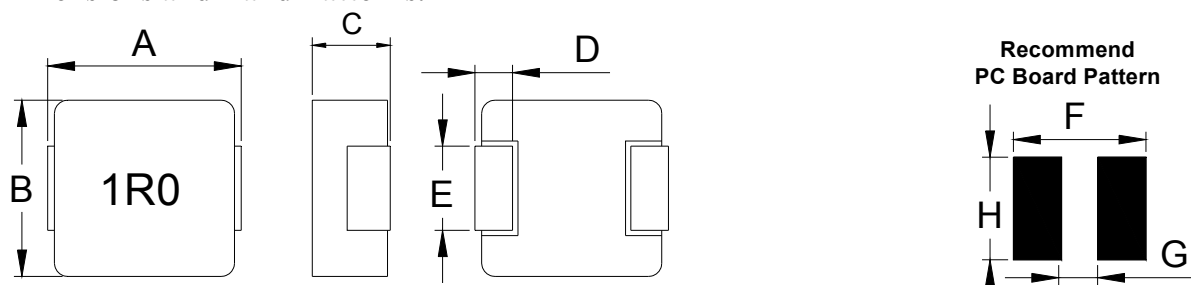


● Dimensions and Land Patterns.



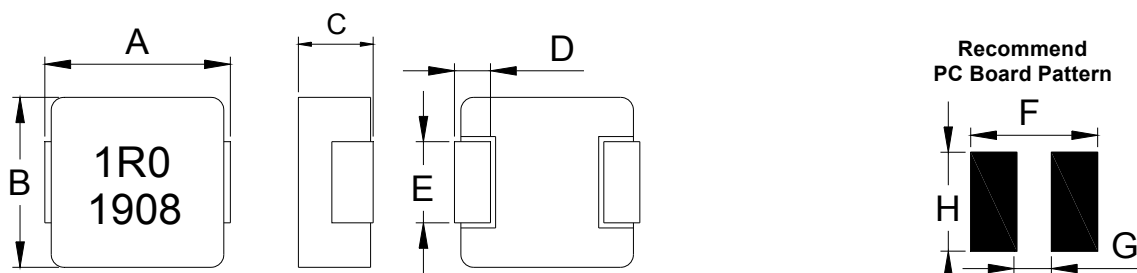
Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)
GSHM0312	3.50±0.2	3.20±0.2	1.00±0.2	0.70±0.2	1.20±0.2	4.1Ref	1.9 Ref	1.45 Ref
GSHM0315	3.50±0.3	3.20±0.2	1.30±0.2	0.70±0.2	1.20±0.2	4.1Ref	1.9 Ref	1.45 Ref
GSHM0318	3.50±0.3	3.20±0.2	1.60±0.2	0.70±0.2	1.20±0.2	4.1Ref	1.9 Ref	1.45 Ref
GSHM0302	3.50±0.2	3.20±0.2	1.80±0.2	0.70±0.2	1.20±0.2	4.1Ref	1.9 Ref	1.45 Ref

Marking: R10=.10 ; 1R0=1.0 ; 100=10 ; 灰色涂装。

● Dimensions and Land Patterns.


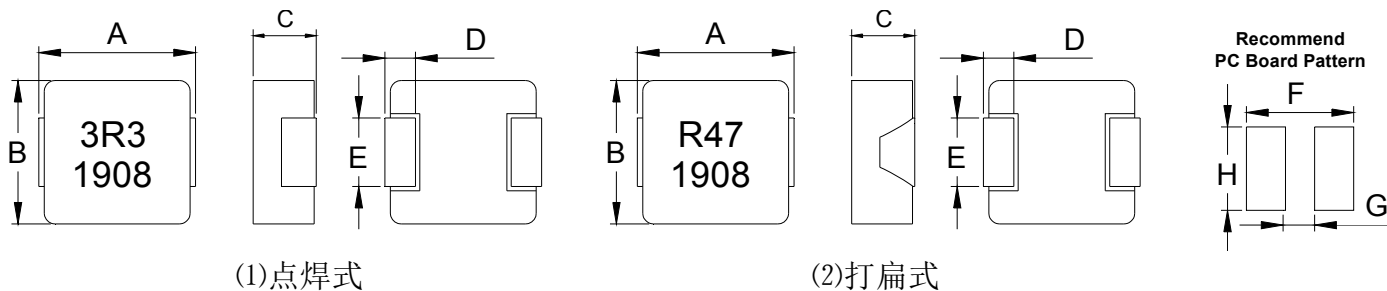
Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)
GSHM0412	4.45±0.25	4.06±0.25	1.00±0.2	0.76±0.30	2.00±0.20	5.2 Ref	2.2 Ref	2.3 Ref
GSHM0415	4.45±0.25	4.06±0.25	1.30±0.2	0.76±0.30	2.00±0.20	5.2 Ref	2.2 Ref	2.3 Ref
GSHM0418	4.45±0.25	4.06±0.25	1.60±0.2	0.76±0.30	2.00±0.20	5.2 Ref	2.2 Ref	2.3 Ref
GSHM0402	4.45±0.25	4.06±0.25	1.80±0.2	0.76±0.30	2.00±0.20	5.2 Ref	2.2 Ref	2.3 Ref

Marking: R10=R10 ; 1R0=1R0 ; 100=100 ; 101=101 ; 灰色涂装。



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)
GSHM0512	5.70±0.3	5.20±0.2	1.00±0.2	1.10±0.3	2.50±0.3	6.2 Ref	2.2 Ref	2.8 Ref
GSHM0515	5.70±0.3	5.20±0.2	1.30±0.2	1.10±0.3	2.50±0.3	6.2 Ref	2.2 Ref	2.8 Ref
GSHM0518	5.70±0.3	5.20±0.2	1.60±0.2	1.10±0.3	2.50±0.3	6.2 Ref	2.2 Ref	2.8 Ref
GSHM0502	5.70±0.3	5.20±0.2	1.80±0.2	1.10±0.3	2.50±0.3	6.2 Ref	2.2 Ref	2.8 Ref
GSHM0503	5.70±0.3	5.20±0.2	2.80±0.2	1.10±0.3	1.50±0.3	6.5 Ref	2.5 Ref	2.8 Ref
GSHM0503K	5.70±0.3	5.20±0.2	2.80±0.2	1.10±0.3	2.50±0.3	6.5 Ref	2.5 Ref	2.8 Ref
GSHM0612	7.00±0.3	6.60±0.3	1.00±0.2	1.80±0.3	2.50±0.3	7.7 Ref	2.5 Ref	3.0 Ref
GSHM0615	7.00±0.3	6.60±0.3	1.30±0.2	1.80±0.3	3.00±0.3	7.7 Ref	2.5 Ref	3.5 Ref
GSHM0618	7.00±0.3	6.60±0.3	1.60±0.2	1.80±0.3	3.00±0.3	7.7 Ref	2.5 Ref	3.5 Ref
GSHM0602	7.00±0.3	6.60±0.3	1.80±0.2	1.80±0.3	3.00±0.3	7.7 Ref	2.5 Ref	3.5 Ref
GSHM0624	7.00±0.3	6.60±0.3	2.20±0.2	1.80±0.3	3.00±0.3	7.7 Ref	2.5 Ref	3.5 Ref
GSHM0603	7.30±0.3	6.60±0.3	2.80±0.2	1.80±0.3	3.00±0.3	8.4 Ref	2.5 Ref	3.5 Ref
GSHM0604	7.30±0.3	6.60±0.3	3.80±0.2	1.80±0.3	3.00±0.3	8.4 Ref	2.5 Ref	3.5 Ref
GSHM0605	7.30±0.3	6.60±0.3	4.80±0.2	1.80±0.3	3.00±0.3	8.4 Ref	2.5 Ref	3.5 Ref

Marking: R10=R10 ; 1R0=1R0 ; 100=100 ; 101=101 及 D/C1908(19年08周,以实际生产周期为准) ; 灰色涂装。

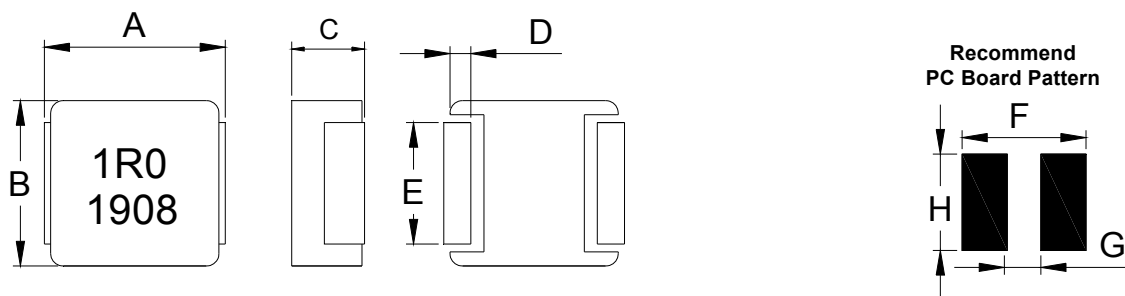
● Dimensions and Land Patterns.


(1)点焊式

(2)打扁式

Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	Inductance / typ	F(mm)	G(mm)	H(mm)
GSHM1002	11.0±0.5	10.0±0.3	1.8±0.2	2.3±0.3	3.00±0.3	1.00uH and 8.20uH / (1)	12.5 Ref	5.4 Ref	3.5 Ref
GSHM1003	11.0±0.5	10.0±0.3	2.80±0.2	2.30±0.3	2.50±0.3	0.47uH and below / (2)	13.6 Ref	5.4 Ref	3.5 Ref
					3.00±0.3	0.56uH and above / (1)			
GSHM1004	11.0±0.5	10.0±0.3	3.80±0.2	2.30±0.3	2.50±0.3	0.56uH and below / (2)	13.6 Ref	5.4 Ref	3.5 Ref
					3.00±0.3	0.68uH and above / (1)			
GSHM1005	11.0±0.5	10.0±0.3	4.80±0.2	2.30±0.3	2.50±0.3	1.80uH and below / (2)	13.6 Ref	5.4 Ref	3.5 Ref
					3.00±0.3	2.20uH and above / (1)			
GSHM1203	13.5±0.5	12.5±0.3	2.80±0.2	2.30±0.3	4.70±0.3	0.36uH and above / (1)	14.2 Ref	8.0 Ref	5.0 Ref
GSHM1235	13.5±0.5	12.5±0.3	3.30±0.2	2.30±0.3	4.00±0.3	0.56 uH and below / (2)	14.2 Ref	8.0 Ref	5.0 Ref
					4.70±0.3	0.60 uH and above / (1)			
GSHM1238	13.5±0.5	12.5±0.3	3.80max	2.30±0.3	4.70±0.3	1.00uH and above / (1)	14.2 Ref	8.0 Ref	5.0 Ref
GSHM1205	13.5±0.5	12.5±0.3	4.80±0.2	2.30±0.3	4.00±0.3	0.56uH and below / (2)	14.2 Ref	8.0 Ref	5.0 Ref
					4.70±0.3	0.68uH and above / (1)			
GSHM1206	13.5±0.5	12.5±0.3	5.70±0.3	2.30±0.3	4.00±0.3	1.50uH and below / (2)	14.2 Ref	8.0 Ref	5.0 Ref
					4.70±0.3	1.70uH and above / (1)			
GSHM1265	13.5±0.5	12.5±0.3	6.20±0.3	2.30±0.3	4.00±0.3	0.56uH and below / (2)	14.2 Ref	8.0 Ref	5.0 Ref
					4.70±0.3	0.68uH and above / (1)			

Marking: R10=R10 ; 1R0=1R0 ; 100=100 ; 101=101 及 D/C1908(19年08周,以实际生产周期为准); 灰色涂装。



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)
GSHM1707	17.6±0.4	16.9±0.3	6.70±0.3	2.10±0.3	11.9±0.3	18.5 Ref	12.2 Ref	12.5 Ref

Marking: R10=R10 ; 1R0=1R0 ; 100=100 ; 101=101 及 D/C1908(19年08周,以实际生产周期为准); 灰色涂装。

Electrical characteristics List
GSHM0312 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0312NTR15	0.15±30%	10.0	N/A	14.0	N/A	9.60	11.0
GSHM0312MTR22	0.22	6.50	N/A	10.0	N/A	14.0	17.0
GSHM0312MTR33	0.33	6.20	N/A	9.20	N/A	16.0	20.0
GSHM0312MTR36	0.36	6.00	N/A	8.50	N/A	18.5	23.0
GSHM0312MTR47	0.47	5.00	N/A	7.20	N/A	25.0	30.0
GSHM0312MTR56	0.56	4.50	N/A	6.60	N/A	31.0	36.0
GSHM0312MTR68	0.68	4.00	N/A	6.10	N/A	34.0	40.0
GSHM0312MTR82	0.82	3.50	N/A	5.80	N/A	41.0	48.0
GSHM0312MT1R0	1.00	3.30	N/A	5.50	N/A	50.0	60.0
GSHM0312MT1R5	1.50	3.00	N/A	4.00	N/A	71.0	85.0
GSHM0312MT2R2	2.20	2.70	N/A	3.40	N/A	98.0	115
GSHM0312MT3R3	3.30	2.00	N/A	3.10	N/A	191	210
GSHM0312MT4R7	4.70	1.60	N/A	2.80	N/A	266	293
GSHM0312MT5R6	5.60	1.50	N/A	2.20	N/A	310	360
GSHM0312MT6R8	6.80	1.40	N/A	2.00	N/A	360	400
GSHM0312MT8R2	8.20	1.20	N/A	1.70	N/A	420	463
GSHM0312MT100	10.0	1.00	N/A	1.40	N/A	498	550

GSHM0315 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0315MTR22	0.22	7.00	N/A	10.8	N/A	14.0	17.0
GSHM0315MTR47	0.47	5.50	N/A	8.00	N/A	23.3	28.0
GSHM0315MTR56	0.56	5.00	N/A	7.20	N/A	28.0	33.0
GSHM0315MTR68	0.68	4.50	N/A	6.50	N/A	34.0	42.0
GSHM0315MT1R0	1.00	3.60	N/A	5.80	N/A	41.0	50.0
GSHM0315MT1R5	1.50	3.40	N/A	4.00	N/A	64.0	77.0
GSHM0315MT2R2	2.20	3.20	N/A	3.80	N/A	82.0	98.0
GSHM0315MT3R3	3.30	2.50	N/A	3.20	N/A	170	205
GSHM0315MT4R7	4.70	1.90	N/A	2.80	N/A	220	264
GSHM0315MT5R6	5.60	1.70	N/A	2.30	N/A	265	318
GSHM0315MT6R8	6.80	1.50	N/A	2.00	N/A	290	348
GSHM0315MT8R2	8.20	1.30	N/A	1.80	N/A	390	468
GSHM0315MT100	10.0	1.20	N/A	1.60	N/A	435	522

Electrical characteristics List
GSHM0318 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0318MTR47	0.47	6.00	N/A	8.50	N/A	21.5	25.0
GSHM0318MTR56	0.56	5.00	N/A	8.00	N/A	21.0	26.0
GSHM0318MTR68	0.68	5.00	N/A	6.50	N/A	29.0	33.5
GSHM0318MT1R0	1.00	3.80	N/A	5.00	N/A	38.0	44.0
GSHM0318MT1R5	1.50	3.50	N/A	4.00	N/A	56.0	65.0
GSHM0318MT2R2	2.20	3.30	N/A	3.70	N/A	73.0	85.0
GSHM0318MT3R3	3.30	2.70	N/A	3.30	N/A	136	158
GSHM0318MT4R7	4.70	2.30	N/A	2.90	N/A	180	208
GSHM0318MT5R6	5.60	1.90	N/A	2.30	N/A	238	275
GSHM0318MT6R8	6.80	1.50	N/A	2.10	N/A	275	320
GSHM0318MT8R2	8.20	1.40	N/A	1.90	N/A	350	405
GSHM0318MT100	10.0	1.30	N/A	1.60	N/A	375	450
GSHM0318MT150	15.0	1.20	N/A	1.50	N/A	520	600

GSHM0302 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0302NTR10	0.10±30%	10.5	9.50	14.0	12.5	6.60	9.00
GSHM0302NTR22	0.22±30%	9.00	8.00	11.2	10.5	11.0	14.0
GSHM0302MTR33	0.33	8.00	7.00	10.0	9.00	17.0	21.0
GSHM0302MTR47	0.47	7.00	6.00	9.00	8.00	19.7	23.0
GSHM0302MTR60	0.60	6.00	5.00	7.50	6.90	24.0	28.0
GSHM0302MTR68	0.68	5.50	4.50	7.00	6.50	25.5	29.0
GSHM0302MTR82	0.82	4.80	4.30	6.00	5.50	27.0	32.0
GSHM0302MT1R0	1.00	4.00	3.50	5.00	4.50	32.0	38.0
GSHM0302MT1R2	1.20	3.90	3.30	4.50	4.00	39.0	47.0
GSHM0302MT1R5	1.50	3.80	3.10	4.00	3.50	42.0	50.0
GSHM0302MT2R2	2.20	3.50	3.00	3.70	3.20	65.0	75.0
GSHM0302MT3R3	3.30	3.00	2.60	3.50	3.00	125	145
GSHM0302MT4R7	4.70	2.60	2.20	3.00	2.60	172	200
GSHM0302MT5R6	5.60	2.20	1.80	2.60	2.20	205	238
GSHM0302MT6R8	6.80	1.90	1.50	2.20	1.90	260	300
GSHM0302MT8R2	8.20	1.60	1.30	1.90	1.60	340	390
GSHM0302MT100	10.0	1.40	1.10	1.60	1.40	366	422

Electrical characteristics List
GSHM0412 Series

Part Number	Inductance (uH) $\pm 20\%$	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (m Ω) Typ.	DCR (m Ω) Max.
GSHM0412NTR10	0.10 $\pm 30\%$	11.5	10.0	25.0	22.0	4.30	5.50
GSHM0412NTR12	0.12 $\pm 30\%$	10.5	10.0	23.0	21.0	4.80	6.20
GSHM0412NTR15	0.15 $\pm 30\%$	10.0	9.00	21.5	19.0	5.50	6.80
GSHM0412MTR22	0.22	8.50	7.50	20.0	17.0	6.60	8.00
GSHM0412MTR25	0.25	8.20	7.00	16.0	14.0	8.00	10.0
GSHM0412MTR33	0.33	7.00	6.00	11.0	9.00	13.6	16.0
GSHM0412MTR36	0.36	6.50	5.50	8.50	7.00	15.5	18.0
GSHM0412MTR47	0.47	6.00	5.00	6.50	5.50	18.0	20.0
GSHM0412MTR60	0.60	5.30	4.50	6.00	5.00	22.5	26.0
GSHM0412MTR68	0.68	5.00	4.00	6.00	5.00	32.0	37.0
GSHM0412MTR82	0.82	4.50	3.80	6.00	5.00	38.0	44.0
GSHM0412MT1R0	1.00	4.00	3.50	6.00	5.00	41.0	47.0
GSHM0412MT1R2	1.20	3.50	2.70	5.00	4.20	48.0	56.0
GSHM0412MT1R5	1.50	3.00	2.40	4.00	3.20	55.0	63.3
GSHM0412MT2R2	2.20	2.80	2.20	3.50	3.00	69.2	80.0
GSHM0412MT3R3	3.30	2.30	2.00	3.00	2.70	84.0	97.0
GSHM0412MT4R7	4.70	2.00	1.70	2.50	2.30	128	145
GSHM0412MT5R6	5.60	1.70	1.50	2.30	2.00	180	208
GSHM0412MT6R8	6.80	1.50	1.30	1.70	1.50	300	360
GSHM0412MT8R2	8.20	1.40	1.10	1.60	1.40	313	376
GSHM0412MT100	10.0	1.30	1.00	1.40	1.20	410	463
GSHM0412MT150	15.0	1.05	0.90	1.20	1.10	550	610
GSHM0412MT180	18.0	0.90	0.70	1.10	0.90	860	960
GSHM0412MT220	22.0	0.80	0.60	1.00	0.80	950	1050

GSHM0415 Series

Part Number	Inductance (uH) $\pm 20\%$	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (m Ω) Typ.	DCR (m Ω) Max.
GSHM0415NT47N	0.047 $\pm 30\%$	20.5	N/A	48.0	N/A	2.10	2.50
GSHM0415MTR12	0.12 $\pm 30\%$	15.0	N/A	20.0	N/A	4.00	5.00
GSHM0415MTR22	0.22	10.0	N/A	20.0	N/A	6.50	7.80
GSHM0415MTR47	0.47	8.00	N/A	11.0	N/A	15.0	19.0
GSHM0415MTR68	0.68	6.50	N/A	8.50	N/A	19.0	21.5
GSHM0415MTR82	0.82	5.50	N/A	7.50	N/A	29.0	36.0
GSHM0415MT1R0	1.00	5.00	N/A	7.00	N/A	34.0	40.0
GSHM0415MT2R2	2.20	3.20	N/A	4.00	N/A	63.0	72.0
GSHM0415MT4R7	4.70	2.20	N/A	2.80	N/A	120	140
GSHM0415MT6R8	6.80	1.70	N/A	2.30	N/A	230	276
GSHM0415MT100	10.0	1.50	N/A	1.90	N/A	345	400

Electrical characteristics List

GSHM0418 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0418MTR22	0.22	12.0	N/A	21.0	N/A	6.60	7.30
GSHM0418MTR33	0.33	9.00	N/A	16.0	N/A	8.50	9.50
GSHM0418MTR56	0.56	6.00	N/A	9.00	N/A	16.0	20.0
GSHM0418MTR68	0.68	5.80	N/A	8.50	N/A	18.5	22.0
GSHM0418MT1R0	1.00	4.80	N/A	6.90	N/A	24.5	30.0
GSHM0418MT1R2	1.20	4.50	N/A	6.30	N/A	30.0	36.0
GSHM0418MT1R5	1.50	4.10	N/A	5.60	N/A	33.0	38.0
GSHM0418MT2R2	2.20	3.50	N/A	4.20	N/A	39.0	45.0
GSHM0418MT3R3	3.30	3.00	N/A	3.60	N/A	82.0	100
GSHM0418MT4R7	4.70	2.30	N/A	3.00	N/A	106	130
GSHM0418MT5R6	5.60	2.10	N/A	2.80	N/A	125	150
GSHM0418MT6R8	6.80	1.95	N/A	2.60	N/A	150	180
GSHM0418MT8R2	8.20	1.80	N/A	2.40	N/A	198	235
GSHM0418MT100	10.0	1.65	N/A	2.10	N/A	220	265

Electrical characteristics List
GSHM0402 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0402NTR10	0.10±30%	14.0	10.0	35.0	30.0	3.20	4.00
GSHM0402NTR12	0.12±30%	13.0	10.5	33.0	29.0	4.00	4.70
GSHM0402NTR15	0.15±30%	14.0	10.5	31.0	27.0	4.20	5.00
GSHM0402NTR18	0.18±30%	13.5	11.0	28.0	25.0	4.60	5.40
GSHM0402NTR22	0.22±30%	13.0	11.0	24.0	21.0	6.60	7.30
GSHM0402MTR24	0.24	12.0	10.0	23.0	20.0	6.90	7.60
GSHM0402MTR33	0.33	10.0	9.00	18.0	16.0	7.80	8.60
GSHM0402MTR36	0.36	9.00	8.00	15.0	13.0	8.70	12.0
GSHM0402MTR47	0.47	8.00	7.00	12.0	11.0	11.2	14.0
GSHM0402MTR50	0.50	7.80	6.80	11.3	10.0	13.0	15.0
GSHM0402MTR56	0.56	7.30	6.50	10.0	9.00	13.5	16.0
GSHM0402MTR60	0.60	7.30	6.50	11.0	10.0	15.5	18.5
GSHM0402MTR68	0.68	7.00	6.30	10.0	9.00	16.0	19.0
GSHM0402MTR82	0.82	6.00	5.30	9.50	8.50	19.0	23.0
GSHM0402MT1R0	1.00	5.00	4.40	8.50	7.50	22.0	27.0
GSHM0402MT1R2	1.20	4.80	4.20	7.80	7.00	25.0	30.0
GSHM0402MT1R5	1.50	4.50	4.00	7.00	6.20	34.8	42.0
GSHM0402MT1R8	1.80	4.30	3.80	6.50	5.80	43.0	52.0
GSHM0402MT2R2	2.20	4.00	3.50	6.00	5.40	51.0	61.0
GSHM0402MT3R3	3.30	3.50	3.00	4.00	3.60	69.0	76.0
GSHM0402MT3R6	3.60	3.10	2.70	3.80	3.40	75.0	90.0
GSHM0402MT4R7	4.70	2.60	2.20	3.50	3.20	95.0	105
GSHM0402MT5R6	5.60	2.20	2.00	3.00	2.70	112	125
GSHM0402MT6R8	6.80	2.10	1.80	2.80	2.50	150	172
GSHM0402MT8R2	8.20	2.00	1.60	2.50	2.20	158	180
GSHM0402MT100	10.0	1.80	1.40	2.30	2.00	215	243
GSHM0402MT120	12.0	1.65	1.30	2.10	1.90	275	330
GSHM0402MT150	15.0	1.50	1.20	1.90	1.70	325	374
GSHM0402MT200	20.0	1.30	1.10	1.70	1.50	435	480
GSHM0402MT220	22.0	1.20	1.00	1.40	1.20	470	500

Electrical characteristics List
GSHM0512 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0512NTR10	0.10±30%	14.0	N/A	14.5	N/A	4.30	5.20
GSHM0512NTR15	0.15±30%	12.0	N/A	14.2	N/A	4.50	6.00
GSHM0512NTR22	0.22±30%	10.7	N/A	14.0	N/A	5.50	6.70
GSHM0512MTR22	0.22	10.7	N/A	14.0	N/A	5.50	6.70
GSHM0512MTR33	0.33	8.50	N/A	13.5	N/A	7.80	9.40
GSHM0512MTR36	0.36	8.00	N/A	13.0	N/A	10.0	11.5
GSHM0512MTR47	0.47	7.00	N/A	11.0	N/A	13.6	15.8
GSHM0512MTR68	0.68	6.00	N/A	9.00	N/A	21.5	24.5
GSHM0512MT1R0	1.00	5.00	N/A	6.00	N/A	26.0	30.0
GSHM0512MT1R2	1.20	4.50	N/A	5.50	N/A	33.0	40.0
GSHM0512MT1R5	1.50	4.00	N/A	5.00	N/A	38.0	44.0
GSHM0512MT2R2	2.20	3.50	N/A	4.00	N/A	65.0	75.0
GSHM0512MT3R3	3.30	3.00	N/A	3.80	N/A	75.0	86.0
GSHM0512MT4R7	4.70	2.50	N/A	3.20	N/A	100	115
GSHM0512MT5R6	5.60	2.40	N/A	3.20	N/A	175	201
GSHM0512MT6R8	6.80	2.00	N/A	3.00	N/A	193	222
GSHM0512MT8R2	8.20	1.70	N/A	2.80	N/A	327	378
GSHM0512MT100	10.0	1.50	N/A	1.80	N/A	335	385
GSHM0512MT150	15.0	1.30	N/A	1.60	N/A	410	470

GSHM0515 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0515NTR10	0.10±30%	16.0	15.0	35.0	30.0	2.75	3.10
GSHM0515NTR12	0.12±30%	17.0	15.0	28.0	25.0	3.30	3.90
GSHM0515NTR15	0.15±30%	16.0	14.0	25.0	23.0	3.60	4.10
GSHM0515NTR20	0.20±30%	15.0	13.0	22.5	20.0	3.80	4.20
GSHM0515NTR22	0.22±30%	12.0	10.0	20.0	18.0	5.00	6.50
GSHM0515MTR33	0.33	9.00	8.00	16.0	15.0	8.50	9.80
GSHM0515MTR36	0.36	8.50	7.50	15.5	14.5	10.0	12.5
GSHM0515MTR47	0.47	8.00	7.00	15.0	14.0	12.0	13.8
GSHM0515MTR68	0.68	7.00	6.00	13.0	12.0	14.0	16.2
GSHM0515MT1R0	1.00	6.00	5.00	9.00	8.00	22.0	25.3
GSHM0515MT1R5	1.50	4.50	3.50	7.00	6.00	39.0	45.0
GSHM0515MT2R2	2.20	4.00	3.50	6.00	5.00	45.0	52.0
GSHM0515MT4R7	4.70	2.70	2.20	4.00	3.00	103	118
GSHM0515MT5R6	5.60	2.40	2.00	3.20	2.70	126	152
GSHM0515MT6R8	6.80	2.30	1.90	3.00	2.50	142	171
GSHM0515MT8R2	8.20	2.10	1.70	2.60	2.20	175	210
GSHM0515MT100	10.0	2.00	1.60	2.30	2.00	210	235
GSHM0515MT150	15.0	1.60	1.30	2.00	1.60	310	380
GSHM0515MT220	22.0	1.20	1.00	1.70	1.30	405	466

Electrical characteristics List
GSHM0518 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0518NTR10	0.10±30%	17.0	16.0	40.0	35.0	2.50	2.80
GSHM0518NTR15	0.15±30%	15.5	14.0	27.0	24.0	3.50	3.90
GSHM0518MTR22	0.22	13.0	11.0	22.0	20.0	4.20	5.00
GSHM0518MTR33	0.33	11.0	10.0	15.0	14.0	7.50	8.60
GSHM0518MTR47	0.47	10.0	9.00	14.0	13.0	9.80	11.3
GSHM0518MTR56	0.56	9.50	8.50	13.5	12.5	11.0	13.0
GSHM0518MTR68	0.68	9.00	8.00	13.0	11.5	12.4	14.3
GSHM0518MT1R0	1.00	6.80	6.00	10.0	9.00	18.2	21.0
GSHM0518MT1R5	1.50	6.00	5.00	9.00	8.00	26.0	30.0
GSHM0518MT2R0	2.00	5.00	4.00	8.00	7.00	35.0	42.0
GSHM0518MT2R2	2.20	4.50	3.70	7.50	6.50	42.0	48.3
GSHM0518MT3R3	3.30	3.50	3.00	5.00	4.50	60.0	69.0
GSHM0518MT4R7	4.70	3.00	2.60	4.50	4.00	85.0	98.0
GSHM0518MT5R6	5.60	2.50	2.10	4.00	3.70	110	127
GSHM0518MT6R8	6.80	2.40	2.00	3.50	3.20	118	137
GSHM0518MT8R2	8.20	2.30	1.90	3.00	2.80	143	165
GSHM0518MT100	10.0	2.30	1.90	2.80	2.50	165	190
GSHM0518MT150	15.0	1.70	1.40	2.30	2.00	275	318

Electrical characteristics List
GSHM0502 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0502NTR10	0.10±30%	18.0	16.0	45.0	40.0	3.60	4.00
GSHM0502NTR12	0.12±30%	17.0	15.0	35.0	30.0	3.70	4.30
GSHM0502NTR15	0.15±30%	16.0	14.0	27.0	23.0	3.80	4.60
GSHM0502MTR22	0.22	15.0	13.0	25.0	22.0	4.00	5.50
GSHM0502MTR24	0.24	13.0	12.0	23.0	21.0	6.00	7.00
GSHM0502MTR33	0.33	12.0	11.0	21.3	20.0	6.30	7.30
GSHM0502MTR36	0.36	11.8	11.0	20.0	18.0	6.80	7.80
GSHM0502MTR47	0.47	11.5	10.5	18.0	16.0	7.30	8.60
GSHM0502MTR56	0.56	10.7	10.2	15.0	14.0	9.30	11.2
GSHM0502MTR68	0.68	10.0	9.50	12.8	12.0	11.0	12.4
GSHM0502MTR82	0.82	8.50	7.50	14.0	12.0	15.0	18.0
GSHM0502MT1R0	1.00	7.00	6.50	13.7	12.0	17.5	20.0
GSHM0502MT1R2	1.20	6.20	6.00	11.0	10.0	23.0	28.0
GSHM0502MT1R5	1.50	5.50	5.00	9.80	9.00	26.5	30.5
GSHM0502MT2R2	2.20	4.20	3.80	9.00	8.00	42.0	50.0
GSHM0502MT2R7	2.70	4.00	3.60	8.20	7.50	50.0	58.0
GSHM0502MT3R3	3.30	3.30	3.00	7.30	7.00	66.0	76.0
GSHM0502MT4R7	4.70	2.80	2.50	5.00	4.60	103	116
GSHM0502MT5R6	5.60	2.50	2.10	4.00	3.70	112	122
GSHM0502MT6R8	6.80	2.40	2.00	3.80	3.50	130	150
GSHM0502MT8R2	8.20	2.30	2.00	3.50	3.30	148	171
GSHM0502MT100	10.0	2.30	2.00	3.40	3.20	180	199
GSHM0502MT150	15.0	1.90	1.60	2.80	2.50	240	270
GSHM0502MT220	22.0	1.50	1.20	1.80	1.50	350	390

Electrical characteristics List
GSHM0503K Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0503KNTR10	0.10±30%	24.0	21.0	40.0	35.0	2.20	2.60
GSHM0503KNTR15	0.15±30%	22.0	19.0	37.0	32.0	2.50	3.00
GSHM0503KNTR20	0.20±30%	20.0	18.0	34.0	30.0	2.70	3.20
GSHM0503KMTR22	0.22	19.0	17.0	32.0	28.0	3.20	3.80
GSHM0503KMTR33	0.33	15.0	13.0	20.0	18.0	4.30	5.00
GSHM0503MTR47	0.47	13.0	11.0	18.0	16.0	6.30	7.10
GSHM0503KMTR56	0.56	12.0	10.0	17.0	16.0	7.80	8.60
GSHM0503KMTR68	0.68	11.0	9.00	15.5	14.0	8.00	9.00
GSHM0503KMTR82	0.82	10.0	8.50	14.0	12.0	8.80	10.0
GSHM0503KMT1R0	1.00	9.00	8.00	13.0	11.0	11.0	12.7
GSHM0503KMT1R2	1.20	8.50	7.50	12.0	10.5	13.0	15.0
GSHM0503KMT1R5	1.50	8.00	7.00	11.5	10.0	14.4	16.6
GSHM0503KMT2R2	2.20	7.00	6.00	11.0	9.50	26.0	29.2
GSHM0503KMT3R3	3.30	6.00	5.00	9.00	8.00	33.0	38.0
GSHM0503KMT4R7	4.70	5.50	4.50	8.00	6.50	48.0	53.0
GSHM0503KMT5R6	5.60	4.70	4.00	7.30	6.00	54.0	62.0
GSHM0503KMT6R8	6.80	4.20	3.60	6.00	4.50	68.0	76.2
GSHM0503KMT100	10.0	3.50	2.70	4.00	3.20	104	120
GSHM0503KMT150	15.0	2.70	2.30	3.20	2.70	165	190
GSHM0503KMT220	22.0	2.20	1.90	2.70	2.30	217	250

Electrical characteristics List
GSHM0503 Series

Part Number	Inductance (μH) $\pm 20\%$	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (m Ω) Typ.	DCR (m Ω) Max.
GSHM0503NTR10	0.10 $\pm 30\%$	23.0	20.0	27.0	24.0	2.50	3.00
GSHM0503NTR15	0.15 $\pm 30\%$	18.0	16.0	30.0	26.0	2.30	2.70
GSHM0503NTR20	0.20 $\pm 30\%$	16.0	14.0	25.0	21.0	2.60	3.20
GSHM0503MTR22	0.22	15.5	13.0	21.0	19.0	3.70	4.40
GSHM0503MTR25	0.25	15.0	12.0	20.0	18.0	3.70	4.10
GSHM0503MTR33	0.33	14.0	11.0	18.0	16.0	4.30	5.00
GSHM0503MTR47	0.47	12.0	10.0	16.0	14.0	6.40	7.40
GSHM0503MTR56	0.56	10.0	9.00	15.0	13.5	8.00	10.0
GSHM0503MTR60	0.60	9.00	N/A	14.5	N/A	8.40	10.4
GSHM0503MTR68	0.68	8.50	7.50	14.0	12.5	10.0	12.0
GSHM0503MTR82	0.82	8.00	7.00	12.5	11.0	11.5	13.0
GSHM0503MT1R0	1.00	7.00	6.00	11.0	9.50	13.0	14.0
GSHM0503MT1R2	1.20	6.50	5.50	11.0	9.50	14.0	16.0
GSHM0503MT1R5	1.50	6.00	5.00	10.0	9.00	16.0	25.0
GSHM0503MT2R2	2.20	5.50	4.80	9.00	8.00	25.0	35.0
GSHM0503MT2R4	2.40	5.30	N/A	8.80	N/A	30.0	36.0
GSHM0503MT3R3	3.30	5.00	4.30	8.00	7.00	32.0	38.0
GSHM0503MT3R6	3.60	4.90	4.10	7.00	6.00	46.0	54.0
GSHM0503MT4R7	4.70	4.60	4.00	6.00	5.00	50.0	53.0
GSHM0503MT5R6	5.60	4.25	3.80	4.50	4.00	55.0	63.0
GSHM0503MT6R8	6.80	4.00	3.60	4.30	3.80	68.0	76.2
GSHM0503MT100	10.0	2.75	2.40	3.50	3.10	110	128
GSHM0503MT150	15.0	2.10	1.90	2.60	2.20	165	190
GSHM0503MT180	18.0	2.00	1.80	2.30	2.00	195	230
GSHM0503MT220	22.0	1.90	1.70	1.70	1.50	220	250
GSHM0503MT330	33.0	1.60	1.50	1.60	1.40	380	440

Electrical characteristics List
GSHM0612 Series

Part Number	Inductance (uH) $\pm 20\%$	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (m Ω) Typ.	DCR (m Ω) Max.
GSHM0612NTR10	0.10 $\pm 30\%$	16.0	N/A	30.0	N/A	3.30	4.00
GSHM0612NTR15	0.15 $\pm 30\%$	14.0	N/A	24.0	N/A	4.90	5.70
GSHM0612NTR22	0.22 $\pm 30\%$	11.0	N/A	19.0	N/A	6.50	7.50
GSHM0612MTR33	0.33	9.50	N/A	16.0	N/A	9.00	10.0
GSHM0612MTR47	0.47	8.50	N/A	12.0	N/A	13.0	17.0
GSHM0612MTR68	0.68	7.00	N/A	9.00	N/A	17.0	19.0
GSHM0612MT1R0	1.00	6.00	N/A	7.00	N/A	27.0	30.0
GSHM0612MT1R2	1.20	5.00	N/A	6.80	N/A	31.0	36.0
GSHM0612MT1R5	1.50	4.50	N/A	6.50	N/A	35.0	40.0
GSHM0612MT2R2	2.20	4.00	N/A	5.00	N/A	53.0	61.0
GSHM0612MT3R3	3.30	3.20	N/A	4.00	N/A	90.0	103
GSHM0612MT4R7	4.70	2.50	N/A	3.80	N/A	130	150
GSHM0612MT6R8	6.80	2.10	N/A	3.00	N/A	172	198
GSHM0612MT100	10.0	1.80	N/A	2.50	N/A	280	290
GSHM0612MT180	18.0	1.35	N/A	2.00	N/A	490	540
GSHM0612MT220	22.0	1.20	N/A	1.70	N/A	540	600

GSHM0615 Series

Part Number	Inductance (uH) $\pm 20\%$	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (m Ω) Typ.	DCR (m Ω) Max.
GSHM0615NTR10	0.10 $\pm 30\%$	17.5	15.0	35.0	31.0	2.50	3.10
GSHM0615NTR12	0.12 $\pm 30\%$	17.0	14.5	30.0	26.0	3.00	3.60
GSHM0615NTR15	0.15 $\pm 30\%$	16.0	14.0	25.0	21.0	3.70	4.50
GSHM0615NTR20	0.20 $\pm 30\%$	14.5	13.0	24.0	20.0	3.90	4.60
GSHM0615NTR22	0.22 $\pm 30\%$	14.0	12.0	22.0	19.0	4.30	5.20
GSHM0615MTR33	0.33	11.0	10.0	18.0	16.0	6.60	7.60
GSHM0615MTR47	0.47	9.50	8.50	16.0	14.0	9.00	10.3
GSHM0615MTR56	0.56	9.00	8.00	15.5	14.0	12.5	14.0
GSHM0615MTR68	0.68	7.50	6.60	15.0	13.0	13.8	15.2
GSHM0615MTR82	0.82	7.00	6.00	14.0	12.0	20.0	24.0
GSHM0615MT1R0	1.00	6.50	5.50	12.0	10.0	23.0	25.8
GSHM0615MT1R2	1.20	5.60	5.00	10.5	9.00	29.0	34.0
GSHM0615MT1R5	1.50	5.00	4.50	9.50	8.50	37.0	42.5
GSHM0615MT2R2	2.20	4.50	4.00	6.50	5.60	48.0	55.0
GSHM0615MT3R3	3.30	4.20	3.70	6.00	5.30	62.0	74.0
GSHM0615MT4R7	4.70	3.80	3.30	5.00	4.60	96.0	111
GSHM0615MT5R6	5.60	3.00	2.60	4.50	4.10	115	138
GSHM0615MT6R8	6.80	2.60	2.20	3.50	3.10	128	148
GSHM0615MT8R2	8.20	2.40	2.10	3.20	2.80	153	184
GSHM0615MT100	10.0	2.30	2.00	2.80	2.50	180	216
GSHM0615MT220	22.0	1.50	1.20	2.50	2.20	420	504
GSHM0615MT330	33.0	1.20	1.00	2.00	1.70	640	750

Electrical characteristics List
GSHM0618 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0618NTR10	0.10±30%	18.0	16.0	45.0	40.0	2.10	2.50
GSHM0618NTR15	0.15±30%	18.0	16.0	34.0	30.0	2.20	2.60
GSHM0618NTR18	0.18±30%	17.0	15.0	32.0	29.0	2.50	3.00
GSHM0618MTR22	0.22	16.0	14.0	26.0	24.0	2.50	3.00
GSHM0618MTR33	0.33	14.0	12.0	22.0	19.0	4.80	5.80
GSHM0618MTR47	0.47	12.0	10.0	18.0	16.0	6.40	7.40
GSHM0618MTR56	0.56	11.0	9.50	17.5	15.0	8.50	10.0
GSHM0618MTR68	0.68	10.0	9.00	17.0	15.0	9.50	11.0
GSHM0618MTR82	0.82	8.50	7.90	15.5	14.0	11.5	14.0
GSHM0618MT1R0	1.00	7.00	6.50	14.0	12.0	14.5	17.0
GSHM0618MT1R2	1.20	6.50	6.00	13.5	11.0	20.0	24.0
GSHM0618MT1R5	1.50	6.00	5.50	13.0	11.0	21.0	25.2
GSHM0618MT2R2	2.20	6.00	5.50	11.0	10.0	31.0	35.0
GSHM0618MT3R3	3.30	5.00	4.50	9.00	8.00	40.0	46.0
GSHM0618MT4R7	4.70	4.00	3.60	7.00	6.00	68.0	76.0
GSHM0618MT5R6	5.60	3.50	3.10	6.00	5.00	78.0	86.0
GSHM0618MT6R8	6.80	3.00	2.60	5.50	4.50	93.0	104
GSHM0618MT8R2	8.20	2.60	2.20	4.50	3.80	123	140
GSHM0618MT100	10.0	2.30	2.00	3.50	3.10	143	160
GSHM0618MT150	15.0	2.00	1.70	3.00	2.70	240	280
GSHM0618MT220	22.0	1.80	1.50	2.50	2.10	300	360
GSHM0618MT330	33.0	1.30	1.10	2.10	1.80	550	650

Electrical characteristics List
GSHM0602 Series

Part Number	Inductance (μH) $\pm 20\%$	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (m Ω) Typ.	DCR (m Ω) Max.
GSHM0602NTR10	0.10 $\pm 30\%$	21.0	N/A	40.0	N/A	2.00	2.40
GSHM0602NTR12	0.12 $\pm 30\%$	20.0	N/A	39.5	N/A	2.20	2.60
GSHM0602NTR15	0.15 $\pm 30\%$	18.0	N/A	39.0	N/A	2.30	2.70
GSHM0602NTR16	0.16 $\pm 30\%$	18.0	N/A	38.0	N/A	2.30	2.70
GSHM0602NTR18	0.18 $\pm 30\%$	18.0	N/A	36.0	N/A	2.40	2.90
GSHM0602NTR20	0.20 $\pm 30\%$	18.0	N/A	35.0	N/A	2.50	3.00
GSHM0602NTR22	0.22 $\pm 30\%$	15.0	N/A	32.0	N/A	3.50	4.00
GSHM0602MTR24	0.24	14.5	N/A	32.0	N/A	3.60	4.30
GSHM0602MTR33	0.33	14.0	N/A	25.0	N/A	4.50	5.00
GSHM0602MTR47	0.47	11.7	N/A	20.0	N/A	7.10	8.30
GSHM0602MTR56	0.56	11.0	N/A	18.0	N/A	7.90	9.30
GSHM0602MTR68	0.68	10.5	N/A	16.0	N/A	8.30	10.0
GSHM0602MTR82	0.82	9.50	N/A	15.0	N/A	12.5	16.0
GSHM0602MT1R0	1.00	8.00	N/A	14.0	N/A	16.5	18.0
GSHM0602MT1R2	1.20	7.50	N/A	13.0	N/A	19.0	23.0
GSHM0602MT1R5	1.50	7.00	N/A	12.0	N/A	23.0	27.0
GSHM0602MT2R2	2.20	6.00	N/A	10.0	N/A	32.0	37.0
GSHM0602MT3R3	3.30	5.00	N/A	8.00	N/A	43.0	48.0
GSHM0602MT4R7	4.70	4.50	N/A	7.00	N/A	53.0	60.0
GSHM0602MT5R6	5.60	4.00	N/A	6.00	N/A	59.0	68.0
GSHM0602MT6R8	6.80	4.00	N/A	5.50	N/A	63.0	73.0
GSHM0602MT8R2	8.20	3.20	N/A	5.00	N/A	101	116
GSHM0602MT100	10.0	2.80	N/A	4.00	N/A	134	154
GSHM0602MT150	15.0	2.10	N/A	3.30	N/A	190	210
GSHM0602MT220	22.0	1.50	N/A	2.50	N/A	236	280

Electrical characteristics List
GSHM0624 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0624NTR10	0.10±30%	30.0	N/A	70.0	N/A	1.40	1.70
GSHM0624NTR15	0.15±30%	30.0	N/A	45.0	N/A	1.80	2.30
GSHM0624MTR20	0.20	23.0	N/A	40.0	N/A	1.90	2.80
GSHM0624MTR22	0.22	21.0	N/A	34.0	N/A	2.00	3.20
GSHM0624MTR33	0.33	18.0	N/A	30.0	N/A	3.60	4.40
GSHM0624MTR36	0.36	17.0	N/A	29.0	N/A	3.80	4.60
GSHM0624MTR47	0.47	15.0	N/A	26.0	N/A	4.80	5.10
GSHM0624MTR56	0.56	13.0	N/A	24.0	N/A	5.50	6.50
GSHM0624MTR60	0.60	13.0	N/A	22.0	N/A	5.70	6.90
GSHM0624MTR68	0.68	13.0	N/A	21.0	N/A	6.40	7.20
GSHM0624MTR82	0.82	11.0	N/A	17.0	N/A	8.00	9.50
GSHM0624MT1R0	1.00	11.0	N/A	16.0	N/A	10.5	13.5
GSHM0624MT1R5	1.50	9.00	N/A	15.0	N/A	17.0	20.0
GSHM0624MT2R2	2.20	7.00	N/A	14.0	N/A	23.0	28.0
GSHM0624MT3R3	3.30	6.00	N/A	10.0	N/A	34.0	39.0
GSHM0624MT4R7	4.70	5.50	N/A	9.00	N/A	41.0	50.0
GSHM0624MT5R6	5.60	5.00	N/A	8.00	N/A	56.0	62.0
GSHM0624MT6R8	6.80	4.00	N/A	7.00	N/A	65.0	72.0
GSHM0624MT8R2	8.20	3.60	N/A	6.00	N/A	81.0	95.0
GSHM0624MT100	10.0	3.20	N/A	5.00	N/A	92.0	101
GSHM0624MT150	15.0	2.50	N/A	3.50	N/A	150	180
GSHM0624MT220	22.0	1.80	N/A	3.00	N/A	185	215

Electrical characteristics List
GSHM0603 Series

Part Number	Inductance (uH) \pm 20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (m Ω) Typ.	DCR (m Ω) Max.
GSHM0603NTR10	0.10 \pm 30%	32.5	N/A	60.0	N/A	1.20	1.70
GSHM0603NTR15	0.15 \pm 30%	27.0	N/A	45.0	N/A	1.50	1.90
GSHM0603NTR18	0.18 \pm 30%	25.0	N/A	43.0	N/A	1.70	2.30
GSHM0603NTR20	0.20 \pm 30%	24.0	N/A	41.0	N/A	1.80	2.50
GSHM0603NTR22	0.22 \pm 30%	23.0	N/A	40.0	N/A	2.10	2.80
GSHM0603MTR24	0.24	22.0	N/A	39.0	N/A	2.50	3.10
GSHM0603MTR25	0.25	21.0	N/A	39.0	N/A	3.30	3.50
GSHM0603MTR30	0.30	21.0	N/A	35.0	N/A	3.20	3.80
GSHM0603MTR33	0.33	20.0	N/A	32.0	N/A	3.50	3.90
GSHM0603MTR36	0.36	19.0	N/A	32.0	N/A	3.60	4.20
GSHM0603MTR40	0.40	18.0	N/A	27.5	N/A	3.71	4.10
GSHM0603MTR47	0.47	17.5	N/A	26.0	N/A	4.00	4.20
GSHM0603MTR56	0.56	16.5	N/A	25.5	N/A	4.70	5.00
GSHM0603MTR60	0.60	16.0	N/A	25.5	N/A	4.70	5.20
GSHM0603MTR68	0.68	15.5	N/A	25.0	N/A	4.80	5.50
GSHM0603MTR75	0.75	14.5	N/A	24.5	N/A	5.50	6.60
GSHM0603MTR82	0.82	13.0	N/A	24.0	N/A	6.70	8.00
GSHM0603MTR90	0.90	11.0	N/A	22.0	N/A	8.30	10.0
GSHM0603MT1R0	1.00	11.0	N/A	22.0	N/A	8.30	10.0
GSHM0603MT1R2	1.20	10.0	N/A	20.0	N/A	10.0	12.0
GSHM0603MT1R5	1.50	9.00	N/A	18.0	N/A	13.0	15.0
GSHM0603MT1R8	1.80	8.50	N/A	16.0	N/A	14.0	17.0
GSHM0603MT2R0	2.00	8.20	N/A	15.0	N/A	16.0	19.0
GSHM0603MT2R2	2.20	8.00	N/A	14.0	N/A	18.0	20.0
GSHM0603MT2R5	2.50	7.00	N/A	13.0	N/A	20.0	22.0
GSHM0603MT2R7	2.70	7.00	N/A	13.0	N/A	24.0	27.0
GSHM0603MT3R3	3.30	6.00	N/A	13.5	N/A	28.0	30.0
GSHM0603MT4R7	4.70	5.50	N/A	10.0	N/A	37.0	40.0
GSHM0603MT5R6	5.60	5.00	N/A	9.00	N/A	43.0	48.0
GSHM0603MT6R8	6.80	4.50	N/A	8.00	N/A	54.0	60.0
GSHM0603MT8R2	8.20	4.00	N/A	7.50	N/A	64.0	68.0
GSHM0603MT100	10.0	3.50	N/A	6.00	N/A	75.0	85.0
GSHM0603MT120	12.0	3.30	N/A	5.50	N/A	81.0	93.0
GSHM0603MT150	15.0	3.00	N/A	4.00	N/A	107	123
GSHM0603MT180	18.0	2.50	N/A	4.00	N/A	140	160
GSHM0603MT220	22.0	2.00	N/A	3.50	N/A	165	190
GSHM0603MT270	27.0	2.00	N/A	3.00	N/A	185	220
GSHM0603MT330	33.0	2.00	N/A	2.50	N/A	200	240
GSHM0603MT400	40.0	1.90	N/A	2.30	N/A	283	340
GSHM0603MT470	47.0	1.75	N/A	2.00	N/A	302	363

Electrical characteristics List
GSHM0604 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0604NTR12	0.12±30%	32.0	N/A	64.0	N/A	0.70	1.00
GSHM0604NTR15	0.15±30%	30.0	N/A	55.0	N/A	0.90	1.20
GSHM0604MTR22	0.22	25.0	N/A	34.0	N/A	1.85	2.10
GSHM0604MTR33	0.33	25.0	N/A	34.0	N/A	2.00	2.60
GSHM0604MTR36	0.36	25.0	N/A	31.0	N/A	2.70	3.10
GSHM0604MTR47	0.47	23.0	N/A	28.0	N/A	3.00	3.40
GSHM0604MTR56	0.56	20.0	N/A	26.0	N/A	3.80	4.30
GSHM0604MTR68	0.68	16.0	N/A	24.0	N/A	4.10	4.50
GSHM0604MTR82	0.82	15.0	N/A	23.0	N/A	5.50	6.30
GSHM0604MT1R0	1.00	14.0	N/A	22.0	N/A	6.80	8.00
GSHM0604MT1R5	1.50	12.0	N/A	20.0	N/A	10.0	12.0
GSHM0604MT2R2	2.20	9.00	N/A	14.0	N/A	11.5	14.0
GSHM0604MT3R3	3.30	8.00	N/A	12.0	N/A	24.0	27.0
GSHM0604MT4R7	4.70	6.00	N/A	11.0	N/A	28.0	32.5
GSHM0604MT5R6	5.60	5.00	N/A	9.00	N/A	33.0	38.0
GSHM0604MT6R8	6.80	4.50	N/A	8.50	N/A	44.0	50.0
GSHM0604MT8R2	8.20	4.50	N/A	8.00	N/A	55.0	64.0
GSHM0604MT100	10.0	4.00	N/A	7.00	N/A	64.0	72.0
GSHM0604MT150	15.0	3.00	N/A	3.50	N/A	80.0	90.0
GSHM0604MT220	22.0	2.50	N/A	3.50	N/A	120	145
GSHM0604MT330	33.0	1.80	N/A	3.20	N/A	180	210
GSHM0604MT470	47.0	1.80	N/A	2.50	N/A	295	350

Electrical characteristics List
GSHM0605 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM0605NTR10	0.10±30%	32.0	N/A	65.0	N/A	0.65	0.78
GSHM0605NTR11	0.11±30%	32.0	N/A	65.0	N/A	0.65	0.78
GSHM0605NTR15	0.15±30%	30.0	N/A	50.0	N/A	1.30	1.70
GSHM0605MTR22	0.22	25.0	N/A	35.0	N/A	1.60	1.90
GSHM0605MTR33	0.33	25.0	N/A	32.0	N/A	2.50	3.00
GSHM0605MTR40	0.40	23.0	N/A	31.0	N/A	3.10	3.70
GSHM0605MTR47	0.47	22.0	N/A	30.0	N/A	3.50	3.90
GSHM0605MTR56	0.56	20.0	N/A	27.0	N/A	3.60	4.20
GSHM0605MTR60	0.60	19.0	N/A	25.0	N/A	3.80	4.30
GSHM0605MTR68	0.68	18.0	N/A	24.0	N/A	4.00	4.50
GSHM0605MTR82	0.82	16.5	N/A	22.0	N/A	4.60	4.90
GSHM0605MT1R0	1.00	15.0	N/A	20.0	N/A	6.10	6.50
GSHM0605MT1R2	1.20	14.0	N/A	18.0	N/A	6.70	7.50
GSHM0605MT1R5	1.50	12.0	N/A	16.5	N/A	8.60	9.00
GSHM0605MT1R8	1.80	12.0	N/A	15.0	N/A	9.50	11.0
GSHM0605MT2R2	2.20	10.0	N/A	14.0	N/A	11.2	12.0
GSHM0605MT3R3	3.30	8.00	N/A	12.0	N/A	19.0	20.9
GSHM0605MT4R7	4.70	6.50	N/A	10.0	N/A	28.0	30.8
GSHM0605MT4R9	4.90	6.30	N/A	9.50	N/A	32.0	38.0
GSHM0605MT5R6	5.60	6.00	N/A	9.00	N/A	43.5	49.0
GSHM0605MT6R8	6.80	5.50	N/A	8.50	N/A	46.0	51.5
GSHM0605MT8R2	8.20	5.00	N/A	8.00	N/A	56.0	63.0
GSHM0605MT100	10.0	4.00	N/A	7.50	N/A	60.0	69.0
GSHM0605MT120	12.0	3.80	N/A	6.70	N/A	68.0	80.0
GSHM0605MT150	15.0	3.50	N/A	6.00	N/A	81.0	92.0
GSHM0605MT220	22.0	2.50	N/A	5.50	N/A	140	170
GSHM0605MT330	33.0	2.00	N/A	3.50	N/A	173	200
GSHM0605MT420	42.0	2.00	N/A	2.80	N/A	212	245
GSHM0605MT470	47.0	1.90	N/A	2.70	N/A	290	330
GSHM0605MT560	56.0	1.60	N/A	2.10	N/A	342	396
GSHM0605MT680	68.0	1.20	N/A	2.00	N/A	386	445

Electrical characteristics List
GSHM1002 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM1002MT1R0	1.0	8.50	7.50	26.0	20.0	15.0	18.0
GSHM1002MT1R5	1.5	8.00	7.00	23.0	18.0	21.0	25.0
GSHM1002MT2R2	2.2	7.00	6.00	19.0	16.0	27.0	32.0
GSHM1002MT2R7	2.7	6.00	5.00	17.0	15.0	34.0	41.0
GSHM1002MT3R3	3.3	5.50	4.50	16.0	14.0	44.0	52.0
GSHM1002MT4R7	4.7	5.00	4.00	14.0	12.0	54.0	64.0
GSHM1002MT6R7	6.8	4.00	3.50	11.0	9.00	63.0	73.0
GSHM1002MT6R8	6.8	4.00	3.50	11.0	9.00	63.0	73.0
GSHM1002MT8R2	8.2	3.20	2.70	9.00	7.00	90.0	105

GSHM1003 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM1003NTR15	0.15±30%	35.0	N/A	60.0	N/A	0.90	1.10
GSHM1003MTR22	0.22	30.0	N/A	55.0	N/A	1.10	1.30
GSHM1003MTR24	0.24	30.0	N/A	50.0	N/A	1.20	1.40
GSHM1003MTR33	0.33	25.0	N/A	47.0	N/A	1.20	1.50
GSHM1003MTR36	0.36	23.0	N/A	40.0	N/A	1.30	1.60
GSHM1003MTR47	0.47	20.0	N/A	33.0	N/A	2.10	2.50
GSHM1003MTR56	0.56	16.0	N/A	24.0	N/A	2.60	3.00
GSHM1003MTR82	0.82	15.0	N/A	22.0	N/A	3.90	4.50
GSHM1003MT1R0	1.00	15.0	N/A	20.0	N/A	4.60	6.00
GSHM1003MT1R5	1.50	13.0	N/A	20.0	N/A	6.50	7.50
GSHM1003MT2R2	2.20	12.0	N/A	16.0	N/A	8.00	9.00
GSHM1003MT3R3	3.30	9.00	N/A	14.0	N/A	14.5	16.0
GSHM1003MT4R7	4.70	7.00	N/A	13.0	N/A	20.5	22.5
GSHM1003MT5R6	5.60	7.00	N/A	12.0	N/A	28.0	32.5
GSHM1003MT6R8	6.80	6.50	N/A	9.50	N/A	30.2	35.0
GSHM1003MT8R2	8.20	6.00	N/A	8.50	N/A	42.0	48.0
GSHM1003MT100	10.0	5.00	N/A	8.00	N/A	50.0	55.0
GSHM1003MT150	15.0	4.00	N/A	7.00	N/A	72.0	86.0
GSHM1003MT220	22.0	3.00	N/A	5.50	N/A	115	140
GSHM1003MT470	47.0	2.00	N/A	4.00	N/A	216	260

Electrical characteristics List
GSHM1004 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM1004NTR10	0.10±30%	46.0	N/A	85.0	N/A	0.35	0.41
GSHM1004NTR15	0.15±30%	43.0	N/A	75.0	N/A	0.50	0.60
GSHM1004NTR18	0.18±30%	38.0	N/A	72.0	N/A	0.54	0.80
GSHM1004NTR20	0.20±30%	35.0	N/A	70.0	N/A	0.66	0.95
GSHM1004MTR22	0.22	35.0	N/A	60.0	N/A	0.80	1.00
GSHM1004MTR25	0.25	33.5	N/A	60.0	N/A	0.80	1.00
GSHM1004MTR27	0.27	33.0	N/A	60.0	N/A	0.82	1.00
GSHM1004MTR33	0.33	31.0	N/A	60.0	N/A	1.00	1.20
GSHM1004MTR39	0.39	30.0	N/A	60.0	N/A	1.10	1.30
GSHM1004MTR45	0.45	29.0	N/A	45.0	N/A	1.30	1.50
GSHM1004MTR47	0.47	28.0	N/A	43.0	N/A	1.30	1.50
GSHM1004MTR56	0.56	25.0	N/A	40.0	N/A	1.60	1.80
GSHM1004MTR68	0.68	22.0	N/A	39.0	N/A	2.40	2.70
GSHM1004MTR75	0.75	22.0	N/A	39.0	N/A	2.40	2.70
GSHM1004MTR88	0.88	20.0	N/A	38.0	N/A	2.50	2.90
GSHM1004MTR90	0.90	20.0	N/A	38.0	N/A	2.60	3.00
GSHM1004MT1R0	1.00	18.0	N/A	36.0	N/A	3.00	3.30
GSHM1004MT1R2	1.20	17.0	N/A	33.0	N/A	3.30	3.80
GSHM1004MT1R5	1.50	16.0	N/A	33.0	N/A	4.00	4.60
GSHM1004MT1R8	1.80	14.0	N/A	30.0	N/A	5.30	6.40
GSHM1004MT2R2	2.20	12.0	N/A	27.0	N/A	6.50	7.00
GSHM1004MT3R3	3.30	11.0	N/A	20.0	N/A	10.8	11.8
GSHM1004MT3R9	3.90	10.5	N/A	19.0	N/A	12.6	14.5
GSHM1004MT4R7	4.70	10.0	N/A	17.0	N/A	15.0	15.5
GSHM1004MT5R6	5.60	9.00	N/A	14.0	N/A	17.0	19.3
GSHM1004MT6R2	6.20	8.70	N/A	13.7	N/A	17.2	21.3
GSHM1004MT6R5	6.50	8.60	N/A	13.6	N/A	17.3	22.3
GSHM1004MT6R8	6.80	8.50	N/A	13.5	N/A	17.5	23.3
GSHM1004MT8R2	8.20	8.00	N/A	12.5	N/A	20.0	22.5
GSHM1004MT100	10.0	7.50	N/A	12.0	N/A	27.0	30.0
GSHM1004MT120	12.0	6.80	N/A	11.0	N/A	36.0	42.0
GSHM1004MT150	15.0	6.25	N/A	10.0	N/A	40.0	45.0
GSHM1004MT180	18.0	5.50	N/A	9.00	N/A	56.0	62.0
GSHM1004MT220	22.0	5.00	N/A	7.00	N/A	64.0	74.0
GSHM1004MT270	27.0	4.00	N/A	6.00	N/A	86.0	100
GSHM1004MT330	33.0	3.50	N/A	5.00	N/A	92.0	112
GSHM1004MT400	40.0	3.30	N/A	4.80	N/A	130	150
GSHM1004MT470	47.0	3.00	N/A	4.50	N/A	145	167
GSHM1004MT680	68.0	2.00	N/A	3.00	N/A	205	240
GSHM1004MT820	82.0	1.50	N/A	2.50	N/A	265	320

Electrical characteristics List
GSHM1005 Series

Part Number	Inductance (μH) $\pm 20\%$	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (m Ω) Typ.	DCR (m Ω) Max.
GSHM1005MTR22	0.22	45.0	N/A	70.0	N/A	0.45	0.50
GSHM1005MTR30	0.30	38.0	N/A	65.0	N/A	0.57	0.61
GSHM1005MTR47	0.47	28.0	N/A	50.0	N/A	1.15	1.38
GSHM1005MTR50	0.50	27.0	N/A	48.0	N/A	1.30	1.50
GSHM1005MTR56	0.56	26.5	N/A	43.0	N/A	1.30	1.50
GSHM1005MTR82	0.82	25.0	N/A	36.0	N/A	2.00	2.40
GSHM1005MTR90	0.90	25.0	N/A	32.0	N/A	2.20	3.00
GSHM1005MT1R0	1.00	22.0	N/A	30.0	N/A	2.80	3.50
GSHM1005MT1R2	1.20	20.0	N/A	28.0	N/A	2.90	3.50
GSHM1005MT1R3	1.30	20.0	N/A	28.0	N/A	3.20	3.70
GSHM1005MT1R5	1.50	19.0	N/A	27.0	N/A	3.50	4.10
GSHM1005MT1R8	1.80	17.5	N/A	25.5	N/A	3.70	4.70
GSHM1005MT2R2	2.20	16.0	N/A	24.0	N/A	5.40	6.00
GSHM1005MT3R3	3.30	14.0	N/A	22.0	N/A	9.00	10.4
GSHM1005MT4R7	4.70	13.0	N/A	19.0	N/A	10.0	12.5
GSHM1005MT5R0	5.00	12.0	N/A	18.0	N/A	12.2	15.0
GSHM1005MT5R6	5.60	10.0	N/A	16.0	N/A	14.0	16.8
GSHM1005MT6R8	6.80	9.50	N/A	15.0	N/A	16.5	21.0
GSHM1005MT8R2	8.20	9.00	N/A	14.5	N/A	18.5	24.0
GSHM1005MT100	10.0	8.00	N/A	13.5	N/A	25.0	29.0
GSHM1005MT120	12.0	6.00	N/A	10.0	N/A	30.0	35.0
GSHM1005MT150	15.0	5.50	N/A	9.50	N/A	37.0	45.0
GSHM1005MT220	22.0	5.00	N/A	9.00	N/A	50.0	60.0
GSHM1005MT240	24.0	4.60	N/A	7.70	N/A	59.0	70.8
GSHM1005MT330	33.0	4.30	N/A	7.50	N/A	80.0	92.0
GSHM1005MT470	47.0	3.80	N/A	6.50	N/A	125	145
GSHM1005MT680	68.0	2.50	N/A	4.00	N/A	176	205
GSHM1005MT101	100	2.00	N/A	3.00	N/A	315	380

Electrical characteristics List

GSHM1203 Series

Part Number	Inductance (μ H) \pm 20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (m Ω) Typ.	DCR (m Ω) Max.
GSHM1203MTR36	0.36	30.0	N/A	50.0	N/A	2.20	2.60
GSHM1203MTR56	0.56	27.0	N/A	42.0	N/A	2.90	3.50
GSHM1203MTR68	0.68	25.0	N/A	40.0	N/A	4.60	5.10
GSHM1203MT1R0	1.00	22.0	N/A	35.0	N/A	6.20	8.00
GSHM1203MT1R5	1.50	18.0	N/A	30.0	N/A	8.00	9.50
GSHM1203MT2R2	2.20	14.0	N/A	25.0	N/A	12.0	17.0
GSHM1203MT3R3	3.30	10.0	N/A	20.0	N/A	20.0	24.0
GSHM1203MT4R7	4.70	8.50	N/A	18.0	N/A	29.0	35.0
GSHM1203MT100	10.0	7.50	N/A	12.0	N/A	55.0	66.0
GSHM1203MT150	15.0	6.00	N/A	9.00	N/A	83.0	92.0
GSHM1203MT220	22.0	4.00	N/A	6.50	N/A	115	140
GSHM1203MT330	33.0	3.00	N/A	5.00	N/A	150	180
GSHM1203MT470	47.0	2.50	N/A	4.50	N/A	230	280

Electrical characteristics List
GSHM1235 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM1235NTR10	0.10±30%	43.0	N/A	84.0	N/A	0.36	0.43
GSHM1235NTR15	0.15±30%	41.0	N/A	75.0	N/A	0.40	0.48
GSHM1235MTR22	0.22	38.5	N/A	65.0	N/A	0.70	0.81
GSHM1235MTR33	0.33	36.5	N/A	62.0	N/A	0.85	1.00
GSHM1235MTR36	0.36	36.0	N/A	60.0	N/A	0.87	1.10
GSHM1235MTR45	0.45	33.0	N/A	58.0	N/A	1.05	1.50
GSHM1235MTR47	0.47	32.0	N/A	55.0	N/A	1.20	1.80
GSHM1235MTR50	0.50	31.0	N/A	54.0	N/A	1.25	1.80
GSHM1235MTR56	0.56	30.0	N/A	53.0	N/A	1.30	1.90
GSHM1235MTR60	0.60	29.0	N/A	51.0	N/A	1.50	2.20
GSHM1235MTR67	0.67	28.0	N/A	49.0	N/A	1.90	2.50
GSHM1235MTR68	0.68	28.0	N/A	49.0	N/A	1.90	2.50
GSHM1235MTR82	0.82	25.0	N/A	44.0	N/A	2.20	3.00
GSHM1235MT1R0	1.00	24.0	N/A	40.0	N/A	2.70	3.50
GSHM1235MT1R2	1.20	21.0	N/A	37.0	N/A	4.00	5.00
GSHM1235MT1R5	1.50	19.0	N/A	35.0	N/A	4.80	5.50
GSHM1235MT1R8	1.80	17.0	N/A	30.0	N/A	5.20	7.00
GSHM1235MT2R2	2.20	16.0	N/A	29.0	N/A	6.30	8.00
GSHM1235MT3R3	3.30	12.0	N/A	27.0	N/A	11.0	13.5
GSHM1235MT4R7	4.70	10.0	N/A	24.0	N/A	15.3	18.5
GSHM1235MT5R6	5.60	9.50	N/A	19.0	N/A	18.0	22.0
GSHM1235MT6R8	6.80	9.00	N/A	18.0	N/A	20.0	24.0
GSHM1235MT8R2	8.20	8.50	N/A	16.0	N/A	23.0	28.0
GSHM1235MT100	10.0	7.50	N/A	14.0	N/A	29.0	34.0
GSHM1235MT150	15.0	6.50	N/A	10.0	N/A	55.0	65.0
GSHM1235MT220	22.0	4.50	N/A	7.00	N/A	83.0	99.0
GSHM1235MT330	33.0	3.50	N/A	6.00	N/A	132	160
GSHM1235MT470	47.0	3.00	N/A	5.50	N/A	181	218

GSHM1238 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM1238MT1R0	1.00	24.0	N/A	40.0	N/A	3.30	3.50
GSHM1238MT1R5	1.50	19.0	N/A	35.0	N/A	5.10	5.50
GSHM1238MT1R8	1.80	16.5	N/A	30.0	N/A	6.00	7.00
GSHM1238MT2R2	2.20	16.0	N/A	29.0	N/A	7.20	8.00
GSHM1238MT3R3	3.30	12.0	N/A	27.0	N/A	11.0	12.0
GSHM1238MT4R7	4.70	10.0	N/A	24.0	N/A	14.3	15.0
GSHM1238MT5R6	5.60	9.50	N/A	19.0	N/A	17.1	18.0
GSHM1238MT6R8	6.80	9.00	N/A	18.0	N/A	19.8	22.0
GSHM1238MT8R2	8.20	8.50	N/A	16.0	N/A	24.8	28.0
GSHM1238MT100	10.0	7.00	N/A	14.0	N/A	30.4	34.0

Electrical characteristics List
GSHM1205 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM1205MTR20	0.20	52.0	N/A	110	N/A	0.45	0.55
GSHM1205MTR22	0.22	52.0	N/A	110	N/A	0.50	0.70
GSHM1205MTR33	0.33	42.0	N/A	80.0	N/A	0.70	0.90
GSHM1205MTR36	0.36	42.0	N/A	75.0	N/A	0.75	0.95
GSHM1205MTR39	0.39	42.0	N/A	70.0	N/A	0.78	0.95
GSHM1205MTR47	0.47	38.0	N/A	65.0	N/A	0.86	1.10
GSHM1205MTR50	0.50	37.0	N/A	60.0	N/A	0.90	1.30
GSHM1205MTR56	0.56	36.0	N/A	55.0	N/A	1.00	1.50
GSHM1205MTR68	0.68	34.0	N/A	54.0	N/A	1.40	1.70
GSHM1205MTR82	0.82	31.0	N/A	52.0	N/A	1.70	2.10
GSHM1205MT1R0	1.00	29.0	N/A	50.0	N/A	1.85	2.50
GSHM1205MT1R2	1.20	28.0	N/A	49.0	N/A	2.50	3.00
GSHM1205MT1R5	1.50	27.0	N/A	48.0	N/A	2.80	3.30
GSHM1205MT1R8	1.80	21.0	N/A	40.0	N/A	4.00	4.90
GSHM1205MT2R2	2.20	20.0	N/A	32.0	N/A	4.20	5.50
GSHM1205MT2R7	2.70	17.0	N/A	32.0	N/A	4.70	6.70
GSHM1205MT3R3	3.30	15.0	N/A	32.0	N/A	6.80	9.20
GSHM1205MT4R7	4.70	12.0	N/A	27.0	N/A	11.4	15.0
GSHM1205MT5R0	5.00	12.0	N/A	24.0	N/A	12.0	15.5
GSHM1205MT5R6	5.60	11.5	N/A	22.0	N/A	12.3	16.5
GSHM1205MT6R0	6.00	11.5	N/A	21.5	N/A	13.0	16.5
GSHM1205MT6R8	6.80	11.0	N/A	21.0	N/A	14.5	18.5
GSHM1205MT8R2	8.20	9.50	N/A	18.0	N/A	16.8	22.5
GSHM1205MT100	10.0	9.00	N/A	16.0	N/A	21.4	25.5
GSHM1205MT120	12.0	8.60	N/A	15.0	N/A	28.0	34.0
GSHM1205MT150	15.0	8.20	N/A	13.0	N/A	32.0	38.0
GSHM1205MT180	18.0	7.50	N/A	11.0	N/A	40.0	45.0
GSHM1205MT220	22.0	6.50	N/A	10.0	N/A	50.0	58.0
GSHM1205MT270	27.0	5.20	N/A	8.50	N/A	63.0	76.0
GSHM1205MT330	33.0	5.00	N/A	8.00	N/A	73.0	88.0
GSHM1205MT390	39.0	4.70	N/A	7.50	N/A	87.0	100
GSHM1205MT470	47.0	4.00	N/A	6.50	N/A	100	120
GSHM1205MT680	68.0	3.50	N/A	5.50	N/A	135	162
GSHM1205MT820	82.0	3.00	N/A	4.80	N/A	198	238

Electrical characteristics List
GSHM1206 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM1206NTR22	0.22±30%	55.0	N/A	100	N/A	0.48	0.65
GSHM1206MTR36	0.36	42.0	N/A	65.0	N/A	0.72	0.90
GSHM1206MTR47	0.47	38.0	N/A	60.0	N/A	0.92	1.30
GSHM1206MTR56	0.56	35.0	N/A	56.0	N/A	1.15	1.50
GSHM1206MTR68	0.68	33.0	N/A	53.0	N/A	1.33	1.70
GSHM1206MT1R0	1.00	29.0	N/A	45.0	N/A	1.80	2.40
GSHM1206MT1R2	1.20	28.0	N/A	44.0	N/A	2.10	2.80
GSHM1206MT1R5	1.50	26.0	N/A	43.0	N/A	2.70	3.20
GSHM1206MT1R7	1.70	25.0	N/A	40.0	N/A	3.50	4.00
GSHM1206MT1R8	1.80	24.0	N/A	39.0	N/A	3.50	4.00
GSHM1206MT1R9	1.90	22.0	N/A	36.0	N/A	3.70	4.30
GSHM1206MT2R2	2.20	21.0	N/A	34.0	N/A	4.00	4.70
GSHM1206MT2R7	2.70	19.0	N/A	31.0	N/A	4.60	5.40
GSHM1206MT2R9	2.90	18.0	N/A	30.0	N/A	4.90	6.00
GSHM1206MT3R3	3.30	17.0	N/A	28.0	N/A	5.80	7.10
GSHM1206MT4R7	4.70	16.0	N/A	25.0	N/A	9.50	11.5
GSHM1206MT5R6	5.60	15.5	N/A	22.0	N/A	10.8	12.6
GSHM1206MT6R8	6.80	15.0	N/A	19.0	N/A	12.0	13.8
GSHM1206MT8R2	8.20	11.0	N/A	17.0	N/A	13.6	16.0
GSHM1206MT100	10.0	11.0	N/A	15.5	N/A	18.0	20.7
GSHM1206MT120	12.0	9.50	N/A	13.5	N/A	20.0	23.0
GSHM1206MT150	15.0	9.00	N/A	13.0	N/A	25.0	29.0
GSHM1206MT180	18.0	8.50	N/A	12.0	N/A	30.0	35.0
GSHM1206MT220	22.0	8.00	N/A	11.0	N/A	34.0	39.5
GSHM1206MT270	27.0	7.00	N/A	9.00	N/A	49.0	56.0
GSHM1206MT330	33.0	6.00	N/A	8.00	N/A	65.0	75.0
GSHM1206MT470	47.0	5.50	N/A	7.00	N/A	80.0	90.0
GSHM1206MT560	56.0	5.30	N/A	6.50	N/A	101	118
GSHM1206MT680	68.0	5.00	N/A	6.00	N/A	120	140
GSHM1206MT820	82.0	4.50	N/A	5.50	N/A	138	161
GSHM1206MT101	100	4.00	N/A	5.00	N/A	180	200
GSHM1206MT121	120	3.50	N/A	4.50	N/A	210	235
GSHM1206MT151	150	3.00	N/A	4.00	N/A	300	350
GSHM1206MT171	170	2.50	N/A	3.50	N/A	345	415
GSHM1206MT221	220	2.00	N/A	3.00	N/A	480	550

Electrical characteristics List
GSHM1265 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM1265MTR15	0.15	55.0	N/A	118	N/A	0.49	0.60
GSHM1265MTR22	0.22	53.0	N/A	112	N/A	0.47	0.60
GSHM1265MTR30	0.30	48.0	N/A	72.0	N/A	0.60	0.72
GSHM1265MTR33	0.33	46.0	N/A	68.0	N/A	0.65	0.80
GSHM1265MTR36	0.36	45.0	N/A	66.0	N/A	0.70	0.90
GSHM1265MTR40	0.40	44.0	N/A	64.0	N/A	0.70	1.00
GSHM1265MTR45	0.45	42.0	N/A	63.0	N/A	0.90	1.20
GSHM1265MTR47	0.47	41.0	N/A	63.0	N/A	0.90	1.20
GSHM1265MTR50	0.50	40.0	N/A	60.0	N/A	0.92	1.25
GSHM1265MTR56	0.56	37.0	N/A	58.0	N/A	1.05	1.20
GSHM1265MTR68	0.68	35.0	N/A	55.0	N/A	1.25	1.50
GSHM1265MTR82	0.82	33.0	N/A	50.0	N/A	1.50	1.90
GSHM1265MT1R0	1.00	30.0	N/A	48.0	N/A	1.70	2.30
GSHM1265MT1R5	1.50	27.0	N/A	45.0	N/A	2.50	3.00
GSHM1265MT1R8	1.80	24.0	N/A	40.0	N/A	3.60	4.00
GSHM1265MT2R2	2.20	22.0	N/A	37.0	N/A	3.80	4.20
GSHM1265MT2R7	2.70	20.0	N/A	32.0	N/A	4.30	5.50
GSHM1265MT3R3	3.30	18.0	N/A	30.0	N/A	5.70	6.80
GSHM1265MT4R7	4.70	13.5	N/A	28.0	N/A	7.00	8.40
GSHM1265MT5R6	5.60	12.5	N/A	23.0	N/A	8.50	10.0
GSHM1265MT6R8	6.80	11.5	N/A	18.0	N/A	9.50	11.5
GSHM1265MT7R0	7.00	11.2	N/A	17.7	N/A	10.0	12.3
GSHM1265MT8R2	8.20	10.5	N/A	16.0	N/A	12.0	15.5
GSHM1265MT100	10.0	10.0	N/A	15.5	N/A	13.2	16.5
GSHM1265MT120	12.0	9.50	N/A	14.0	N/A	16.0	20.0
GSHM1265MT130	13.0	9.00	N/A	13.0	N/A	21.0	24.0
GSHM1265MT150	15.0	9.00	N/A	12.5	N/A	23.2	28.0
GSHM1265MT220	22.0	9.00	N/A	12.0	N/A	32.5	37.0
GSHM1265MT250	25.0	8.50	N/A	11.5	N/A	40.0	47.0
GSHM1265MT330	33.0	8.00	N/A	11.0	N/A	48.0	58.0
GSHM1265MT470	47.0	6.50	N/A	9.50	N/A	76.0	90.0
GSHM1265MT680	68.0	4.80	N/A	7.80	N/A	110	130
GSHM1265MT820	82.0	4.50	N/A	6.50	N/A	135	155
GSHM1265MT101	100	4.20	N/A	5.50	N/A	145	165

Electrical characteristics List

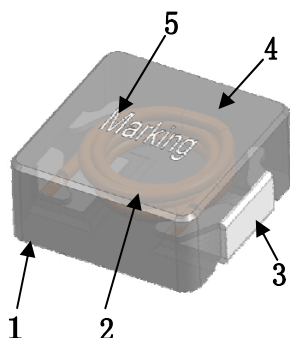
GSHM1770 Series

Part Number	Inductance (uH)±20%	I rms (A) Typ.	I rms (A) Max.	I sat (A) Typ.	I sat (A) Max.	DCR (mΩ) Typ.	DCR (mΩ) Max.
GSHM1707MTR33	0.33	70.0	N/A	90.0	N/A	0.75	0.90
GSHM1707MTR45	0.45	62.0	N/A	85.0	N/A	0.80	0.96
GSHM1707MTR47	0.47	62.0	N/A	80.0	N/A	0.95	1.03
GSHM1707MTR82	0.82	53.0	N/A	65.0	N/A	1.40	1.80
GSHM1707MT1R0	1.00	52.0	N/A	60.0	N/A	1.60	2.00
GSHM1707MT1R3	1.30	49.0	N/A	54.0	N/A	1.70	2.30
GSHM1707MT1R5	1.50	47.0	N/A	52.0	N/A	2.00	2.50
GSHM1707MT1R8	1.80	45.0	N/A	49.0	N/A	2.10	2.50
GSHM1707MT2R2	2.20	43.5	N/A	47.0	N/A	2.40	2.70
GSHM1707MT3R3	3.30	28.0	N/A	45.0	N/A	3.50	3.90
GSHM1707MT4R7	4.70	25.0	N/A	41.0	N/A	4.80	5.50
GSHM1707MT5R6	5.60	21.0	N/A	40.0	N/A	5.80	7.05
GSHM1707MT6R8	6.80	19.0	N/A	32.0	N/A	8.40	9.20
GSHM1707MT7R4	7.40	18.5	N/A	27.0	N/A	8.80	9.70
GSHM1707MT8R2	8.20	18.0	N/A	25.0	N/A	9.60	10.8
GSHM1707MT100	10.0	16.5	N/A	24.0	N/A	11.8	13.0
GSHM1707MT150	15.0	12.5	N/A	23.0	N/A	17.8	20.5
GSHM1707MT220	22.0	12.0	N/A	18.0	N/A	25.1	26.5
GSHM1707MT330	33.0	10.7	N/A	15.0	N/A	38.0	44.0
GSHM1707MT390	39.0	9.20	N/A	11.0	N/A	40.0	48.0
GSHM1707MT470	47.0	8.70	N/A	9.50	N/A	48.0	55.0
GSHM1707MT560	56.0	7.80	N/A	9.00	N/A	54.0	62.0
GSHM1707MT680	68.0	7.00	N/A	8.00	N/A	68.0	80.0
GSHM1707MT820	82.0	5.70	N/A	7.00	N/A	87.0	100
GSHM1707MT101	100	5.30	N/A	6.50	N/A	102	118

Note:

1. Test frequency : L : 100KHz /1.0V;
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately Δt of 40°C.
4. Saturation Current (I_{sat}) will cause L0 to drop approximately 30%;
5. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Special inquiries besides the above common used types can be met on your requirement.

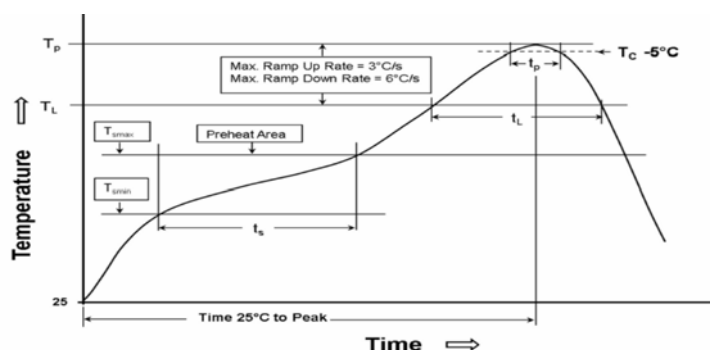
Material List



NO.	Items	Materials
1	Core	Carbonyl Powder.
2	Wire	Polyester Wire or equivalent.
3	Clip	100% Pb free solder(Ni+Sn---Plating)
4	paint	Epoxy resin
5	Ink	Halogen-free ketone

Soldering Specifications

(1) Classification Reflow Profile for SMT components:



Reflow times: 3 times max , Soldering iron Method : $350 \pm 5^\circ\text{C}$ max , 3 sec.

(2) Classification Reflow Profiles:

Profile Feature	Pb-Free Assembly
Preheat	
-Temperature Min(T_{smin})	150°C
-Temperature Max(T_{smax})	200°C
-Time(t_s)from(T_{smin} to T_{smax})	60-120seconds
Ramp-up rate(T_L to T_p)	3°C/second max.
Liquidous temperature(T_L)	217°C
Time(t_L)maintained above T_L	60-150 seconds
Peak package body temperature(T_p)	See Table(3)
Time within 5°C of actual peak temperature(t_p)	20-30seconds
Ramp-down rate(T_p to T_L)	6°C/second max.
Time 25°C to peak temperature	8 minutes max.

(3) Package Classification Reflow Temperature

	Package thickness	Volume mm^3	Volume mm^3 350-2000	Volume mm^3 >2000
PB-Free Assembly	<1.6mm	260°C	260°C	260°C
PB-Free Assembly	1.6-2.5mm	260°C	250°C	245°C
PB-Free Assembly	$\geq 2.5\text{mm}$	250°C	245°C	245°C

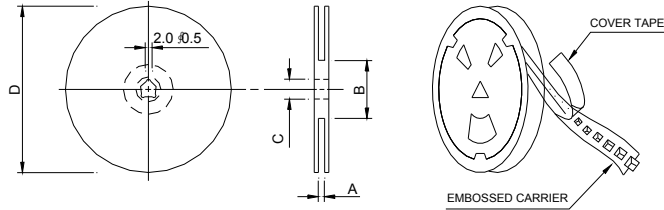
Reflow is referred to standard IPC/JEDEC J-STD-020D ◦

Friendly reminder

- When there are questions concerning measurement result : measurement shall be made after 48 ± 2 hours of recovery under the standard condition
- This power choke coil itself does not have any protective function in abnormal condition such as overload, short-circuit and open-circuit conditions, etc. Therefore, it shall be confirmed as the end product that there is no risk of smoking, fire, dielectric withstand voltage, insulation resistance, etc. in abnormal conditions to provide protective devices and/or protection circuit in the end product.
- When this power choke coil was used in a similar or new product to the original one, sometimes it might not be able to satisfy the specifications due to different condition of use.
- Dielectric withstanding test with higher voltage than specific value will damage insulating material and shorten its life.
- This power choke coil must not be used in wet condition by water, coffee or any liquid because insulation strength becomes very low in this condition.
- Please consult our company to confirm the reliability of the process required to wash or use or exposure to a chemical solvent used in this product. PCB washing tested to MIL-STD-202 Method. Use only alcohol to wash the PCB and dry it off immediately (Marking will be washed away if using alcohol) ◦

Packaging Information

(1) Reel Dimension

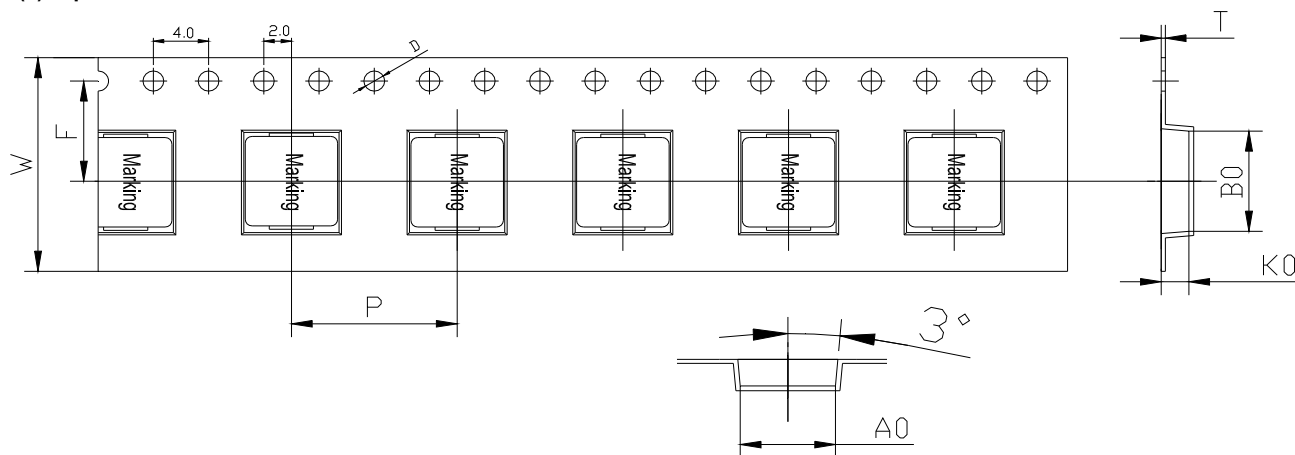


Series	Type	A(mm)	B(mm)	C(mm)	D(mm)
0312	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330
0315	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330
0318	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330
0302	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330
0412	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330
0415	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330
0418	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330
0402	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330
0512	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330
0515	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330
0518	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.2	330
0502	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.5	330
0503	13"x12mm	12.4+2/-0	100±2	13+0.5/-0.5	330
0612	13"x16mm	16.4+2/-0	100±2	13+0.5/-0.2	330
0615	13"x16mm	16.4+2/-0	100±2	13+0.5/-0.2	330
0618	13"x16mm	16.4+2/-0	100±2	13+0.5/-0.2	330

Series	Type	A(mm)	B(mm)	C(mm)	D(mm)
0602	13"x16mm	16.4+2/-0	100±2	13+0.5/-0.2	330
0624	13"x16mm	16.4+2/-0	100±2	13+0.5/-0.2	330
0603	13"x16mm	16.4+2/-0	100±2	13+0.5/-0.2	330
0604	13"x16mm	16.4+2/-0	100±2	13+0.5/-0.2	330
0605	13"x16mm	16.4+2/-0	100±2	13+0.5/-0.2	330
1002	13"x24mm	24.4+2/-0	100±2	13+0.5/-0.2	330
1003	13"x24mm	24.4+2/-0	100±2	13+0.5/-0.2	330
1004	13"x24mm	24.4+2/-0	100±2	13+0.5/-0.2	330
1005	13"x24mm	24.4+2/-0	100±2	13+0.5/-0.2	330
1203	13"x24mm	24.4+2/-0	100±2	13+0.5/-0.2	330
1235	13"x24mm	24.4+2/-0	100±2	13+0.5/-0.2	330
1238	13"x24mm	24.4+2/-0	100±2	13+0.5/-0.2	330
1205	13"x24mm	24.4+2/-0	100±2	13+0.5/-0.2	330
1206	13"x24mm	24.4+2/-0	100±2	13+0.5/-0.2	330
1265	13"x24mm	24.4+2/-0	100±2	13+0.5/-0.2	330
1707	13"x32mm	32.4+2/-0	100±2	13+0.5/-0.2	330

Packaging Information

(2) Tape Dimension



Size	Bo(mm)	Ao(mm)	Ko(mm)	P(mm)	W(mm)	F(mm)	T(mm)	Packaging Quantity
0312	3.8±0.1	3.5±0.1	1.5±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	4000 pcs/R
0315	3.8±0.1	3.5±0.1	1.8±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	3000 pcs/R
0318	3.8±0.1	3.5±0.1	2.0±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	3000 pcs/R
0302	3.8±0.1	3.5±0.1	2.2±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	3000 pcs/R
0412	4.9±0.1	4.4±0.1	1.3±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	4000 pcs/R
0415	5.0±0.1	4.4±0.1	1.7±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	3500 pcs/R
0418	5.0±0.1	4.4±0.1	2.1±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	3000 pcs/R
0402	5.1±0.1	4.2±0.1	2.4±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	3000 pcs/R
0512	6.3±0.1	5.5±0.1	1.5±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	4000 pcs/R
0515	6.0±0.1	5.4±0.1	1.8±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	3500 pcs/R
0518	6.2±0.1	5.5±0.1	2.0±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	3000 pcs/R
0502	6.2±0.1	5.5±0.1	2.3±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	3000 pcs/R
0503	5.6±0.1	5.5±0.1	3.3±0.1	8.0±0.1	12±0.3	5.5±0.1	0.35±0.05	2000 pcs/R
0612	7.0±0.1	7.0±0.1	1.5±0.1	12.0±0.1	16±0.3	7.5±0.1	0.35±0.05	3000 pcs/R
0615	7.7±0.1	7.0±0.1	1.8±0.1	12.0±0.1	16±0.3	7.5±0.1	0.35±0.05	2000 pcs/R
0618	7.7±0.1	7.0±0.1	2.1±0.1	12.0±0.1	16±0.3	7.5±0.1	0.35±0.05	2000 pcs/R
0602	7.7±0.1	7.0±0.1	2.3±0.1	12.0±0.1	16±0.3	7.5±0.1	0.35±0.05	1500 pcs/R
0624	7.1±0.1	7.1±0.1	2.7±0.1	12.0±0.1	16±0.3	7.5±0.1	0.35±0.05	1500 pcs/R
0603	7.1±0.1	7.1±0.1	3.2±0.1	12.0±0.1	16±0.3	7.5±0.1	0.35±0.05	1000 pcs/R
0604	7.1±0.1	7.1±0.1	4.3±0.1	12.0±0.1	16±0.3	7.5±0.1	0.40±0.05	1000 pcs/R
0605	7.1±0.1	7.1±0.1	5.3±0.1	12.0±0.1	16±0.3	7.5±0.1	0.40±0.05	800 pcs/R
1002	12.3±0.1	10.4±0.1	2.2±0.1	16.0±0.1	24±0.3	11.5±0.1	0.40±0.05	1000 pcs/R
1003	12.3±0.1	10.4±0.1	3.5±0.1	16.0±0.1	24±0.3	11.5±0.1	0.40±0.05	1000 pcs/R
1004	12.3±0.1	10.4±0.1	4.5±0.1	16.0±0.1	24±0.3	11.5±0.1	0.40±0.05	500 pcs/R
1005	12.3±0.1	10.4±0.1	5.5±0.1	16.0±0.1	24±0.3	11.5±0.1	0.40±0.05	500 pcs/R
1203	14.6±0.1	13.0±0.1	3.3±0.1	16.0±0.1	24±0.3	11.5±0.1	0.40±0.05	500 pcs/R
1235	14.6±0.1	13.0±0.1	4.0±0.1	16.0±0.1	24±0.3	11.5±0.1	0.40±0.05	500 pcs/R
1238	14.6±0.1	13.0±0.1	4.3±0.1	16.0±0.1	24±0.3	11.5±0.1	0.40±0.05	500 pcs/R
1205	14.8±0.1	13.0±0.1	5.5±0.1	16.0±0.1	24±0.3	11.5±0.1	0.50±0.05	500 pcs/R
1206	14.8±0.1	13.0±0.1	6.5±0.1	16.0±0.1	24±0.3	11.5±0.1	0.50±0.05	500 pcs/R
1265	14.8±0.1	13.0±0.1	7.0±0.1	16.0±0.1	24±0.3	11.5±0.1	0.50±0.05	500 pcs/R
1707	19.2±0.1	17.6±0.1	7.5±0.1	24.0±0.1	32±0.3	14.2±0.1	0.50±0.05	200 pcs/R