

MHF Series

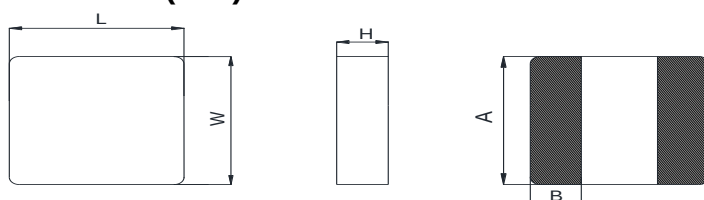
Mini Molding Power Inductors

Product Outline

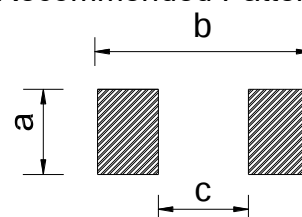
- Alloy powder DC-DC Converter shielded inductors-Mini Molding Types.
- A wide range of product line up is available to meet the various requirements.
- High saturation current, low DCR, high efficiency.
- Very low acoustic noise and very low leakage flux noise.
- Ideally used in MOBILE, flat TV, LCD display, AV devices, car navigation, LED lighting, smart screen, power modules.



Dimensions(mm)



Recommended Patterns



Type	L	W	H	A	B	a	b	c	Packaging (pcs/reel)
MHF141265S	1.4±0.2	1.2±0.2	0.65 Max	1.2	0.45	1.3	1.6	0.4	3000
MHF141207S	1.4±0.2	1.2±0.2	0.7 Max	1.2	0.45	1.3	1.6	0.4	3000
MHF141208S	1.4±0.2	1.2±0.2	0.8 Max	1.2	0.5	1.3	1.6	0.4	3000
MHF160808S	1.6±0.2	0.8±0.2	0.8 Max	0.8	0.55	0.9	1.7	0.4	3000
MHF201265S	2.0±0.2	1.2±0.2	0.65 Max	1.2	0.65	1.4	2.1	0.5	3000
MHF201208S	2.0±0.2	1.2±0.2	0.8 Max	1.2	0.65	1.4	2.1	0.5	3000
MHF201210S	2.0±0.2	1.2±0.2	1.0 Max	1.2	0.65	1.4	2.1	0.5	3000
MHF201212S	2.0±0.2	1.2±0.2	1.2 Max	1.2	0.65	1.4	2.1	0.5	3000
MHF201665S	2.0±0.2	1.6±0.2	0.65 Max	1.6	0.65	1.8	2.1	0.5	3000
MHF201608S	2.0±0.2	1.6±0.2	0.8Max	1.6	0.65	1.8	2.1	0.5	3000
MHF201610S	2.0±0.2	1.6±0.2	1.0 Max	1.6	0.65	1.8	2.1	0.5	3000
MHF201612S	2.0±0.2	1.6±0.2	1.2 Max	1.6	0.65	1.8	2.1	0.5	3000
MHF252008S	2.5±0.2	2.0±0.2	0.8Max	2.0	0.9	2.1	2.6	0.6	3000
MHF252010S	2.5±0.2	2.0±0.2	1.0 Max	2.0	0.9	2.1	2.6	0.6	3000
MHF252012S	2.5±0.2	2.0±0.2	1.2 Max	2.0	0.9	2.1	2.6	0.6	3000
MHF303010S	3.0±0.2	3.0±0.2	1.0 Max	3.0	1.15	3.0	3.2	0.9	3000
MHF303012S	3.0±0.2	3.0±0.2	1.2 Max	3.0	1.15	3.0	3.2	0.9	3000
MHF303015S	3.0±0.2	3.0±0.2	1.5 Max	3.0	1.15	3.0	3.2	0.9	3000
MHF303018S	3.0±0.2	3.0±0.2	1.8 Max	3.0	1.15	3.0	3.2	0.9	3000
MHF303020S	3.0±0.2	3.0±0.2	2.0 Max	3.0	1.15	3.0	3.2	0.9	3000
MHF322510S	3.2±0.2	2.5±0.2	1.0 Max	2.5	1.15	2.6	3.5	0.9	3000
MHF322512S	3.2±0.2	2.5±0.2	1.2 Max	2.5	1.15	2.6	3.5	0.9	3000
MHF322520S	3.2±0.2	2.5±0.2	2.0 Max	2.5	1.15	2.6	3.5	0.9	2000
MHF404010S	4.1±0.2	4.1±0.2	1.0 Max	4.1	1.5	4.1	4.5	1.3	3000
MHF404012S	4.1±0.2	4.1±0.2	1.2 Max	4.1	1.5	4.1	4.5	1.3	3000
MHF404015S	4.1±0.2	4.1±0.2	1.5 Max	4.1	1.5	4.1	4.5	1.3	3000
MHF404030S	4.1±0.2	4.1±0.2	3.0 Max	4.1	1.5	4.1	4.5	1.3	2000

Dimensions without tolerance are typical.

Product Identification

MHF **201610** **S** **-** **4R7** **M** **C** **S**

① ② ③ ④ ⑤ ⑥ ⑦

- ① Product Series No.
- ② Dimension symbol: 2.0x1.6x1.0mm (LxWxH)
- ③ Internal control code.
- ④ Inductance value: 100=10×10⁰ uH=10uH 4R7=4.7uH
- ⑤ Tolerance: K=±10%, M=±20%, N=±30%, P=±35%
- ⑥ Packing Style: T=Taping, B=Bulk.
- ⑦ Characteristic parameter level.

MHF141265S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF141265S-R24MCS	0.24	±20%	27	5.0	5.5	6.0	6.5
MHF141265S-R33MCS	0.33	±20%	32	4.0	4.4	4.2	4.4
MHF141265S-R47MCS	0.47	±20%	45	3.0	3.4	2.7	3.0

MHF141207S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF141207S-R24MCS	0.24	±20%	28	4.3	4.6	3.6	4.0
MHF141207S-R47MCS	0.47	±20%	38	3.5	3.8	3.3	3.8

MHF141208S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF141208S-R10MCS	0.1	±20%	14	8.0	8.5	7.5	8.0
MHF141208S-R24MCS	0.24	±20%	27	5.7	6.0	3.7	4.1
MHF141208S-R33MCS	0.33	±20%	28	5.0	5.3	3.5	4.0
MHF141208S-R47MCS	0.47	±20%	35	4.2	4.6	3.3	3.8
MHF141208S-1R0MCS	1.0	±20%	77	2.5	3.0	2.5	3.0
MHF141208S-2R2MCS	2.2	±20%	225	1.7	1.9	1.8	2.0

MHF160808S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF160808S-R18MCS	0.18	±20%	21	5.5	6.0	5.2	5.8
MHF160808S-R22MCS	0.22	±20%	40	5.0	5.5	3.0	3.4
MHF160808S-R24MCS	0.24	±20%	41	4.8	5.3	2.9	3.3
MHF160808S-R33MCS	0.33	±20%	35	4.4	4.7	4.3	4.7
MHF160808S-R47MCS	0.47	±20%	100	3.7	4.1	2.3	2.6
MHF160808S-R56MCS	0.56	±20%	110	3.5	4.0	1.9	2.2
MHF160808S-R68MCS	0.68	±20%	130	3.0	3.3	1.9	2.1
MHF160808S-1R0MCS	1.0	±20%	200	2.6	3.0	1.8	2.1
MHF160808S-1R5MCS	1.5	±20%	285	2.0	2.4	1.4	1.7
MHF160808S-2R2MCS	2.2	±20%	260	1.3	1.5	1.2	1.4
MHF160808S-3R3MCS	3.3	±20%	600	1.2	1.4	0.9	1.0
MHF160808S-4R7MCS	4.7	±20%	700	1.0	1.2	0.8	1.0
MHF160808S-100MCS	10	±20%	1600	0.7	0.8	0.45	0.5

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MHF201265S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF201265S-R15MCS	0.15	±20%	14	6.0	6.5	5.5	6.0
MHF201265S-R24MCS	0.24	±20%	20	4.8	5.1	4.5	4.8
MHF201265S-R68MCS	0.68	±20%	60	3.2	3.5	3.0	3.3
MHF201265S-1R0MCS	1.0	±20%	86	2.5	2.8	2.3	2.6
MHF201265S-2R2MCS	2.2	±20%	230	1.5	1.8	1.4	1.7
MHF201265S-4R7MCS	4.7	±20%	530	1.0	1.2	0.9	1.1

MHF201208S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF201208S-R11MCS	0.11	±20%	12	9.0	9.5	6.5	7.0
MHF201208S-R15MCS	0.15	±20%	13	7.0	7.5	6.3	6.8
MHF201208S-R24MCS	0.24	±20%	23	6.0	6.5	5.9	6.5
MHF201208S-R33MCS	0.33	±20%	45	4.8	5.2	4.0	4.3
MHF201208S-R47MCS	0.47	±20%	50	4.6	5.0	3.4	3.7
MHF201208S-R68MCS	0.68	±20%	60	3.7	4.2	3.3	3.6
MHF201208S-1R0MCS	1.0	±20%	70	3.5	4.0	2.9	3.3
MHF201208S-1R5MCS	1.5	±20%	135	2.5	3.0	1.9	2.3
MHF201208S-2R2MCS	2.2	±20%	185	2.3	2.6	1.8	2.2
MHF201208S-3R3MCS	3.3	±20%	300	1.6	1.9	1.5	1.8
MHF201208S-4R7MCS	4.7	±20%	325	1.4	1.6	1.5	1.7
MHF201208S-6R8MCS	6.8	±20%	530	1.1	1.3	1.0	1.1

MHF201210S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF201210S-R10MCS	0.1	±20%	13	8.0	8.5	7.0	7.5
MHF201210S-R11MCS	0.11	±20%	8.5	12	14.1	9.5	10
MHF201210S-R22MCS	0.22	±20%	22	6.8	7.3	6.5	7.1
MHF201210S-R24MCS	0.24	±20%	23	6.7	7.2	6.4	7.0
MHF201210S-R33MCS	0.33	±20%	32	6.0	6.5	5.0	5.5
MHF201210S-R47MCS	0.47	±20%	36	5.0	5.5	4.3	4.7
MHF201210S-R56MCS	0.56	±20%	31	4.8	5.2	4.7	5.3
MHF201210S-R68MCS	0.68	±20%	43	4.5	5.0	4.0	4.3
MHF201210S-1R0MCS	1.0	±20%	63	3.5	4.0	3.5	3.9
MHF201210S-1R5MCS	1.5	±20%	85	2.7	3.2	2.6	3.1
MHF201210S-2R2MCS	2.2	±20%	150	2.4	2.7	1.7	2.0
MHF201210S-3R3MCS	3.3	±20%	260	1.8	2.2	1.5	1.8
MHF201210S-4R7MCS	4.7	±20%	300	1.6	1.8	1.4	1.6
MHF201210S-6R8MCS	6.8	±20%	520	1.2	1.45	1.3	1.5
MHF201210S-100MCS	10	±20%	660	1.0	1.2	1.0	1.1

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MHF201212S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF201212S-R11MCS	0.11	±20%	6.2	11	12	11	12
MHF201212S-R24MCS	0.24	±20%	16	8.5	9.0	7.0	7.5
MHF201212S-R33MCS	0.33	±20%	20.5	6.0	6.5	5.8	6.3
MHF201212S-R47MCS	0.47	±20%	23.5	5.0	5.5	5.5	6.0
MHF201212S-1R0MCS	1.0	±20%	48	3.6	4.0	3.5	3.9
MHF201212S-3R3MCS	3.3	±20%	210	1.8	2.0	1.6	1.8

MHF201665S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF201665S-R47MCS	0.47	±20%	40	4.0	4.4	4.5	5.0
MHF201665S-R68MCS	0.68	±20%	50	3.1	3.4	3.5	4.0
MHF201665S-1R0MCS	1.0	±20%	70	2.7	3.0	3.0	3.5
MHF201665S-2R2MCS	2.2	±20%	170	2.0	2.2	2.6	2.8

MHF201608S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF201608S-R22MCS	0.22	±20%	19	5.6	6.1	5.9	6.6
MHF201608S-R24MCS	0.24	±20%	20	5.5	6.0	5.8	6.5
MHF201608S-R33MCS	0.33	±20%	24	5.3	5.8	4.8	5.5
MHF201608S-R47MCS	0.47	±20%	27	5.0	5.5	5.2	5.5
MHF201608S-R68MCS	0.68	±20%	44	4.2	4.6	3.5	3.8
MHF201608S-1R0MCS	1.0	±20%	60	3.1	3.3	3.3	3.6
MHF201608S-1R5MCS	1.5	±20%	85	2.8	3.0	2.8	3.1
MHF201608S-2R2MCS	2.2	±20%	140	2.3	2.5	2.0	2.2
MHF201608S-3R3MCS	3.3	±20%	220	1.8	2.1	1.5	1.8
MHF201608S-4R7MCS	4.7	±20%	290	1.5	1.7	1.4	1.6
MHF201608S-6R8MCS	6.8	±20%	405	1.3	1.4	1.2	1.4
MHF201608S-100MCS	10	±20%	800	0.9	1.0	0.9	1.0

① Inductance tested at 1MHz/1.0 Vrms using an Agilent/HP 4284A or equivalent.

② DCR measured on a micro-ohmmeter.

③ Isat: The DC current at which the inductance decreases by 30% of it's initial value.

④ Irms: The DC current at which $\Delta t=40^{\circ}\text{C}$.

MHF Series

Mini Molding Power Inductors

MHF201610S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF201610S-R10MCS	0.1	±20%	12	8.4	9.0	8.0	8.5
MHF201610S-R11MCS	0.11	±20%	13	8.2	8.9	7.5	8.0
MHF201610S-R15MCS	0.15	±20%	14	8.0	8.7	7.0	7.6
MHF201610S-R22MCS	0.22	±20%	18	7.5	8.2	6.3	6.9
MHF201610S-R24MCS	0.24	±20%	19	7.4	8.0	6.2	6.8
MHF201610S-R33MCS	0.33	±20%	22	6.5	7.0	5.3	5.7
MHF201610S-R47MCS	0.47	±20%	25	5.5	6.3	5.0	5.5
MHF201610S-R56MCS	0.56	±20%	23	5.0	5.5	7.0	7.5
MHF201610S-R68MCS	0.68	±20%	32	4.7	5.2	4.3	4.6
MHF201610S-1R0MCS	1.0	±20%	43	4.2	4.6	4.1	4.5
MHF201610S-1R5MCS	1.5	±20%	100	2.9	3.2	2.3	2.6
MHF201610S-2R2MCS	2.2	±20%	130	2.8	3.0	2.1	2.5
MHF201610S-3R3MCS	3.3	±20%	170	2.0	2.3	1.5	1.7
MHF201610S-4R7MCS	4.7	±20%	220	1.8	2.0	1.4	1.6
MHF201610S-6R8MCS	6.8	±20%	350	1.5	1.7	1.5	1.7
MHF201610S-100MCS	10	±20%	580	1.1	1.4	0.7	1.0

MHF201612S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF201612S-R10MCS	0.1	±20%	6.0	11.5	13	10	12
MHF201612S-R11MCS	0.11	±20%	5.6	11	12.5	14.5	15.5
MHF201612S-R15MCS	0.15	±20%	10	10.5	12	9.0	10
MHF201612S-R22MCS	0.22	±20%	10.5	9.2	9.7	8.8	9.3
MHF201612S-R24MCS	0.24	±20%	11	8.7	9.2	8.6	9.1
MHF201612S-R33MCS	0.33	±20%	15	7.3	7.8	7.2	7.7
MHF201612S-R47MCS	0.47	±20%	17	6.0	6.7	6.0	6.7
MHF201612S-R68MCS	0.68	±20%	23	5.3	6.0	5.3	6.0
MHF201612S-1R0MCS	1.0	±20%	36	4.5	5.0	4.5	5.0
MHF201612S-1R5MCS	1.5	±20%	50	3.5	4.0	3.5	4.0
MHF201612S-2R2MCS	2.2	±20%	90	2.7	3.1	2.9	3.3
MHF201612S-3R3MCS	3.3	±20%	165	2.3	2.7	2.0	2.4
MHF201612S-6R8MCS	6.8	±20%	300	1.7	1.9	1.7	1.8

MHF252008S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF252008S-R47MCS	0.47	±20%	27	5.3	6.0	6.0	6.5
MHF252008S-R68MCS	0.68	±20%	32	4.5	5.0	4.4	4.9
MHF252008S-1R0MCS	1.0	±20%	40	4.0	4.5	4.0	4.3
MHF252008S-1R5MCS	1.5	±20%	75	3.0	3.5	3.0	3.4
MHF252008S-2R2MCS	2.2	±20%	77	2.6	3.0	2.6	3.0
MHF252008S-3R3MCS	3.3	±20%	180	2.1	2.5	2.1	2.5
MHF252008S-4R7MCS	4.7	±20%	215	1.5	1.9	1.5	2.0
MHF252008S-100MCS	10	±20%	600	0.9	1.1	1.2	1.4

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MHF Series

Mini Molding Power Inductors

MHF252010S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF252010S-R10MCS	0.10	±20%	8.5	12.5	13.5	11	12
MHF252010S-R15MCS	0.15	±20%	9.0	9.5	10.5	8.5	9.5
MHF252010S-R22MCS	0.22	±20%	17	7.9	8.6	6.5	6.8
MHF252010S-R24MCS	0.24	±20%	17	7.9	8.6	6.4	6.7
MHF252010S-R33MCS	0.33	±20%	19	7.3	7.7	6.25	6.45
MHF252010S-R47MCS	0.47	±20%	22	6.45	7.0	5.65	6.15
MHF252010S-R68MCS	0.68	±20%	27	5.6	5.88	5.05	5.75
MHF252010S-R82MCS	0.82	±20%	29	4.8	5.3	4.1	4.5
MHF252010S-1R0MCS	1.0	±20%	30	4.85	5.25	4.12	4.45
MHF252010S-1R5MCS	1.5	±20%	55	3.95	4.35	3.05	3.45
MHF252010S-2R2MCS	2.2	±20%	70	3.1	3.35	2.15	2.5
MHF252010S-3R3MCS	3.3	±20%	98	2.5	2.8	2.1	2.5
MHF252010S-4R7MCS	4.7	±20%	175	2.0	2.65	1.6	2.0
MHF252010S-6R8MCS	6.8	±20%	315	1.95	2.45	1.45	1.6
MHF252010S-100MCS	10	±20%	550	1.45	1.58	0.97	1.1

MHF252012S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF252012S-R10MCS	0.10	±20%	7.5	12.5	13.5	10.5	12
MHF252012S-R15MCS	0.15	±20%	10	12	13	10	11.5
MHF252012S-R22MCS	0.22	±20%	13	9.0	9.6	7.6	8.2
MHF252012S-R24MCS	0.24	±20%	15	8.8	9.3	7.55	8.1
MHF252012S-R33MCS	0.33	±20%	17	7.8	8.35	6.45	6.8
MHF252012S-R47MCS	0.47	±20%	19	7.1	7.55	6.1	6.55
MHF252012S-R68MCS	0.68	±20%	23	6.1	6.6	5.6	6.3
MHF252012S-1R0MCS	1.0	±20%	42	5.15	5.7	3.8	4.3
MHF252012S-1R5MCS	1.5	±20%	50	4.15	4.5	3.25	3.7
MHF252012S-2R2MCS	2.2	±20%	65	3.4	3.8	2.8	3.1
MHF252012S-3R3MCS	3.3	±20%	96	2.7	3.05	1.8	2.3
MHF252012S-4R7MCS	4.7	±20%	170	2.15	2.5	1.5	1.8
MHF252012S-6R8MCS	6.8	±20%	270	1.75	2.05	1.45	1.65
MHF252012S-100MCS	10	±20%	400	1.46	1.65	1.05	1.25
MHF252012S-150MCS	15	±20%	565	1.3	1.4	1.3	1.4
MHF252012S-220MCS	22	±20%	800	1.0	1.1	1.1	1.2

MHF303010S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF303010S-1R0MCS	1.0	±20%	35	4.8	5.3	6.5	7.0
MHF303010S-2R2MCS	2.2	±20%	66	3.5	4.0	4.5	5.0
MHF303010S-3R3MCS	3.3	±20%	102	2.8	3.1	3.0	3.4
MHF303010S-4R7MCS	4.7	±20%	140	2.3	2.7	2.8	3.2
MHF303010S-6R8MCS	6.8	±20%	270	1.5	1.8	1.8	2.1
MHF303010S-100MCS	10	±20%	360	1.3	1.6	1.7	2.0

All specifications are subject to change without notice.

MHF303012S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF303012S-R10MCS	0.1	±20%	6.0	18	20	17	18
MHF303012S-R47MCS	0.47	±20%	11	8.0	8.5	10	11
MHF303012S-R68MCS	0.68	±20%	16	6.5	7.0	7.0	7.5
MHF303012S-1R0MCS	1.0	±20%	27	5.5	6.0	5.0	5.5
MHF303012S-1R5MCS	1.5	±20%	34	5.0	5.5	5.5	6.0
MHF303012S-2R2MCS	2.2	±20%	50	4.5	5.0	4.3	4.8
MHF303012S-4R7MCS	4.7	±20%	120	2.5	3.0	2.5	3.0
MHF303012S-100MCS	10	±20%	220	2.0	2.3	1.9	2.3
MHF303012S-150MCS	15	±20%	380	1.6	1.9	1.3	1.6

MHF303015S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF303015S-R15MCS	0.15	±20%	6.0	15	16	11	12
MHF303015S-R20MCS	0.2	±20%	5.9	15	16	12	13
MHF303015S-R33MCS	0.33	±20%	8.5	11	12	13	14
MHF303015S-R47MCS	0.47	±20%	11	9.0	10	8.0	9.0
MHF303015S-1R0MCS	1.0	±20%	22	6.5	7.0	5.5	6.0
MHF303015S-1R5MCS	1.5	±20%	26	5.5	6.0	7.5	8.0
MHF303015S-2R2MCS	2.2	±20%	50	4.5	5.0	4.0	4.5
MHF303015S-4R7MCS	4.7	±20%	104	3.5	4.0	3.0	3.5
MHF303015S-6R8MCS	6.8	±20%	180	3.0	3.5	2.0	2.5
MHF303015S-100MCS	10	±20%	215	2.5	2.8	1.5	2.0
MHF303015S-220MCS	22	±20%	700	1.2	1.6	1.0	1.2

MHF303018S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF303018S-R22MCS	0.22	±20%	7.0	16	17	9.0	10
MHF303018S-R47MCS	0.47	±20%	10	11	12	8.0	9.0
MHF303018S-R68MCS	0.68	±20%	14.5	10	11	9.0	10
MHF303018S-1R0MCS	1.0	±20%	21	6.8	7.6	5.8	6.3
MHF303018S-1R5MCS	1.5	±20%	26	7.0	8.0	6.4	6.8
MHF303018S-4R7MCS	4.7	±20%	87	4.2	4.7	3.0	3.4

- ① Inductance tested at 1MHz/1.0 Vrms using an Agilent/HP 4284A or equivalent.
- ② DCR measured on a micro-ohmmeter.
- ③ Isat: The DC current at which the inductance decreases by 30% of it's initial value.
- ④ Irms: The DC current at which $\Delta t=40^{\circ}\text{C}$.

MHF303020S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF303020S-R10MCS	0.1	±20%	4.5	23	25	16	17
MHF303020S-R15MCS	0.15	±20%	5.0	17	18	12	13
MHF303020S-R22MCS	0.22	±20%	6.5	16	17.5	10	11
MHF303020S-R33MCS	0.33	±20%	9.0	15	17	9.0	10
MHF303020S-R36MCS	0.36	±20%	9.0	14.5	16.5	9.0	10
MHF303020S-R47MCS	0.47	±20%	11	13.5	15	8.0	9.0
MHF303020S-R50MCS	0.5	±20%	12	13	15	8.0	9.0
MHF303020S-R68MCS	0.68	±20%	16	11	13	7.8	8.5
MHF303020S-1R0MCS	1.0	±20%	20	7.3	8.0	6.0	6.5
MHF303020S-1R5MCS	1.5	±20%	25	6.5	7.0	5.8	6.3
MHF303020S-2R2MCS	2.2	±20%	45	5.5	6.0	4.3	4.7
MHF303020S-3R3MCS	3.3	±20%	63	5.4	5.9	4.0	4.5
MHF303020S-4R7MCS	4.7	±20%	73	4.0	4.8	3.8	4.2
MHF303020S-6R8MCS	6.8	±20%	135	3.8	4.5	3.0	3.2
MHF303020S-100MCS	10	±20%	160	3.3	3.8	2.2	2.5
MHF303020S-150MCS	15	±20%	260	2.2	2.6	1.5	1.8

MHF322510S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF322510S-R22MCS	0.22	±20%	11	8.0	8.5	8.0	8.5
MHF322510S-R33MCS	0.33	±20%	15	7.8	8.3	7.8	8.3
MHF322510S-R47MCS	0.47	±20%	22	7.6	8.3	5.9	6.4
MHF322510S-R68MCS	0.68	±20%	28	7.0	7.5	5.7	6.2
MHF322510S-1R0MCS	1.0	±20%	30	5.3	6.0	4.9	5.4
MHF322510S-1R5MCS	1.5	±20%	42	4.4	5.0	3.6	4.0
MHF322510S-2R2MCS	2.2	±20%	66	3.5	4.0	3.4	3.7
MHF322510S-3R3MCS	3.3	±20%	120	3.3	3.7	2.3	2.7
MHF322510S-4R7MCS	4.7	±20%	140	2.5	2.8	1.9	2.3
MHF322510S-6R8MCS	6.8	±20%	320	2.0	2.4	1.6	1.9
MHF322510S-100MCS	10	±20%	365	1.8	2.2	1.8	2.2

MHF322512S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF322512S-R10MCS	0.10	±20%	7.0	16.5	18	11	12
MHF322512S-R22MCS	0.22	±20%	10	11	11.5	8.7	9.2
MHF322512S-R24MCS	0.24	±20%	12	10.5	11	8.5	9.0
MHF322512S-R33MCS	0.33	±20%	14	9.2	10	8.1	8.45
MHF322512S-R47MCS	0.47	±20%	19	8.2	8.6	7.2	7.5
MHF322512S-R68MCS	0.68	±20%	23	7.7	8.15	6.8	7.3
MHF322512S-1R0MCS	1.0	±20%	30	5.8	6.6	4.8	5.3
MHF322512S-1R5MCS	1.5	±20%	44	4.7	5.1	4.3	4.7
MHF322512S-2R2MCS	2.2	±20%	70	4.2	4.6	3.0	3.6
MHF322512S-3R3MCS	3.3	±20%	95	3.25	3.7	2.5	2.95
MHF322512S-4R7MCS	4.7	±20%	135	2.6	2.9	2.0	2.3
MHF322512S-6R8MCS	6.8	±20%	210	2.45	2.85	1.95	2.1
MHF322512S-100MCS	10	±20%	240	1.9	2.3	1.85	2.2

All specifications are subject to change without notice.

MHF322520S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF322520S-70NMCS	0.07	±20%	3.2	24	25	20	22
MHF322520S-R27MCS	0.27	±20%	6.5	15	16	15	16
MHF322520S-R33MCS	0.33	±20%	9.0	14	15.5	9.0	9.5
MHF322520S-R47MCS	0.47	±20%	10.5	13	15	8.5	9.5
MHF322520S-R68MCS	0.68	±20%	14.5	11	13	8.0	9.0
MHF322520S-1R0MCS	1.0	±20%	17.5	8.3	9.0	7.5	8.2
MHF322520S-1R5MCS	1.5	±20%	25	6.0	6.8	6.0	6.5
MHF322520S-2R2MCS	2.2	±20%	43	5.5	6.5	4.8	5.4
MHF322520S-3R3MCS	3.3	±20%	60	3.5	4.5	4.0	4.5
MHF322520S-4R7MCS	4.7	±20%	94	3.0	4.0	3.0	3.5
MHF322520S-6R8MCS	6.8	±20%	125	2.9	3.8	2.3	2.8

MHF404010S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF404010S-1R0MCS	1.0	±20%	26	4.8	5.3	6.5	7.0
MHF404010S-4R7MCS	4.7	±20%	140	3.5	3.8	3.0	3.4
MHF404010S-100MCS	10	±20%	280	2.0	2.2	2.0	2.5

MHF404012S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF404012S-R47MCS	0.47	±20%	14	11.5	12	8.5	9.0
MHF404012S-R60MCS	0.6	±20%	14.5	8.5	9.0	8.0	8.5
MHF404012S-R68MCS	0.68	±20%	18	9.0	10	7.5	8.5
MHF404012S-1R0MCS	1.0	±20%	25	10	11	5.5	6.3
MHF404012S-1R5MCS	1.5	±20%	34.5	7.0	8.0	5.0	6.0
MHF404012S-2R2MCS	2.2	±20%	55	6.0	6.5	4.5	5.0
MHF404012S-3R3MCS	3.3	±20%	80	5.0	5.5	4.0	4.5
MHF404012S-4R7MCS	4.7	±20%	110	4.5	5.0	3.0	3.5
MHF404012S-5R6MCS	5.6	±20%	140	4.0	4.5	2.5	3.0
MHF404012S-6R8MCS	6.8	±20%	160	3.5	3.8	2.3	2.8
MHF404012S-100MCS	10	±20%	235	2.5	2.8	2.0	2.5

MHF404015S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF404015S-4R7MCS	4.7	±20%	63	5.0	5.5	4.5	5.0
MHF404015S-5R6MCS	5.6	±20%	80	4.3	4.8	4.0	4.5

- ① Inductance tested at 1MHz/1.0 Vrms using an Agilent/HP 4284A or equivalent.
- ② DCR measured on a micro-ohmmeter.
- ③ Isat: The DC current at which the inductance decreases by 30% of it's initial value.
- ④ Irms: The DC current at which $\Delta t=40^{\circ}\text{C}$.

MHF404030S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance Tolerance	DCR ② (mΩ) max.	Isat ③ (A) Max.	Isat ③ (A) Typ.	Irms ④ (A) Max.	Irms ④ (A) Typ.
MHF404030S-R33MCS	0.33	±20%	6.0	23	25	15	16
MHF404030S-R47MCS	0.47	±20%	7.0	21	23	14	15
MHF404030S-R56MCS	0.56	±20%	7.5	20	22	14	15
MHF404030S-R68MCS	0.68	±20%	10	15	17	8.0	9.5
MHF404030S-6R8MCS	6.8	±20%	62	5.1	6.3	3.8	4.2
MHF404030S-8R2MCS	8.2	±20%	102	4.8	5.2	3.5	3.9
MHF404030S-100MCS	10	±20%	110	4.5	4.9	3.3	3.7
MHF404030S-220MCS	22	±20%	220	3.0	3.4	2.2	2.5

- ① Inductance tested at 1MHz/1.0 Vrms using an Agilent/HP 4284A or equivalent.
② DCR measured on a micro-ohmmeter.
③ sat: The DC current at which the inductance decreases by 30% of it's initial value.
④ Irms: The DC current at which $\Delta t=40^{\circ}\text{C}$.