



## Features 特点

- ◆ Magnetically shielded construction.  
磁屏蔽结构
- ◆ Various high power inductors are superior to be high saturation  
大功率，高饱和电流，低阻抗
- ◆ Provided in embossed carrier tape packaging for use with automatic mounting machines  
编带包装便于自动贴装

## Application 应用

- ◆ Ideally used in Notebook PC, LCD TV, DVD, Game machine, STB, Projector etc as DC-DC Converter inductors.  
用于笔记本电脑、液晶电视、DVD、游戏机、机顶盒、投影仪等直流-直流变换器电感等

## Product Identification 产品标识

MDRH 104    R -    100    M  
①    ②    ③    ④    ⑤

- ① Series name 系列名称
- ② Product dimensions 产品尺寸：(104=3.3\*3.3\*1.1mm)
- ③ R :Type Base 底座类型
- ④ Inductance Value 电感量：(100=10μH)
- ⑤ Inductance Tolerance 电感量公差：(M:20%;N:30%)

## Shapes And Dimensions/Recommended Footprint 外形及焊位尺寸示意图

Fig1

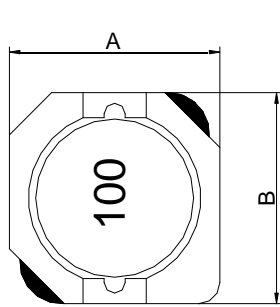
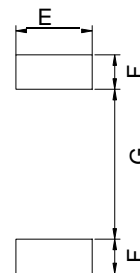
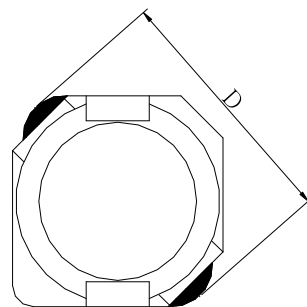


Fig2 Recommended Land Pattern 焊盘规格



Series	Shape	A max	B max	C max	D max	E typ	F typ	G typ	H typ
MDRH103R	Fig1	10.0±0.3	10.2±0.3	2.8±0.3	13.5	3.0±0.1	1.2±0.15	7.7±0.3	
MDRH104R	Fig1	10.0±0.3	10.2±0.3	3.8±0.3	13.5	3.0±0.1	1.2±0.15	7.7±0.3	
MDRH105R	Fig1	10.0±0.3	10.2±0.3	4.8±0.3	13.5	3.0±0.1	1.2±0.15	7.7±0.3	



## Electrical Characteristics 电气特性

MDRH-103R							
MING - CI	Inductance	Percent	L Test	DC Resistance	Rated Current	Rated Current	Marking
P/N	L(μ H)	Tolerance	Frequency	DCR (mΩ)	Isat(A)	Irms(A)	
MDRH103R-0R8M	0.8	±20%	100KHz,0.3V	5.7MAX	11.20	8.30	0R8
MDRH103R-1R5M	1.5	±20%	100KHz,0.3V	11MAX	8.00	5.80	1R5
MDRH103R2R2M	2.2	±20%	100KHz,0.3V	16.9MAX	6.70	5.10	2R2
MDRH103R-3R3M	3.3	±20%	1KHz,0.3V	21MAX	5.56	4.70	3R3
MDRH103R-4R7M	4.7	±20%	1KHz,0.3V	30MAX	4.65	4.00	4R7
MDRH103R-6R8M	6.8	±20%	1KHz,0.3V	35MAX	3.84	3.60	6R8
MDRH103R-8R2M	8.2	±20%	1KHz,0.3V	50MAX	3.54	3.00	8R2
MDRH103R-100M	10	±20%	1KHz,0.3V	59MAX	3.18	2.80	100
MDRH103R-150M	15	±20%	1KHz,0.3V	91MAX	2.60	2.05	150
MDRH103R-220M	22	±20%	1KHz,0.3V	143MAX	2.16	1.60	220
MDRH103R-330M	33	±20%	1KHz,0.3V	202MAX	1.74	1.35	330
MDRH103R-470M	47	±20%	1KHz,0.3V	299MAX	1.43	1.20	470
MDRH103R-560M	56	±20%	1KHz,0.3V	325MAX	1.36	1.15	560
MDRH103R-680M	68	±20%	1KHz,0.3V	429MAX	1.22	0.95	680
MDRH103R-820M	82	±20%	1KHz,0.3V	494MAX	1.14	0.80	820
MDRH103R-101M	100	±20%	1KHz,0.3V	683MAX	1.02	0.70	101
MDRH103R-121MC	120	±20%	1KHz,0.3V	754MAX	0.89	0.65	121
MDRH103R-151M	150	±20%	1KHz,0.3V	871MAX	0.84	0.51	151

Isat: Direct current at which the inductance drops approximate 25% from its value without current.

Irms: Direct current when the temperature of the product rise( $\Delta T=40^{\circ}\text{C}$ ) from  $20^{\circ}\text{C}$  ambient.

MDRH104R							
MING - CI	Inductance	Percent	L Test	DC Resistance	Rated Current	Rated Current	Marking
P/N	L(μ H)	Tolerance	Frequency	DCR (mΩ)	Isat(A)	Irms(A)	
MDRH104R-1R5M	1.5	±20%	100KHz,0.3V	8.1MAX	10.00	6.50	1R5
MDRH104R-2R5M	2.5	±20%	100KHz,0.3V	10.5MAX	7.50	6.10	2R5
MDRH104R-3R8M	3.8	±20%	100KHz,0.3V	13.0MAX	6.00	5.50	3R8
MDRH104R-5R2M	5.2	±20%	100KHz,0.3V	22MAX	5.50	5.40	5R2
MDRH104R-7R0M	7.0	±20%	100KHz,0.3V	27MAX	4.80	4.50	7R0
MDRH104R-100M	10	±20%	1KHz,0.3V	35MAX	4.40	3.80	100
MDRH104R-120M	12	±20%	1KHz,0.3V	46MAX	3.70	3.40	120
MDRH104R-150M	15	±20%	1KHz,0.3V	50MAX	3.60	3.10	150
MDRH104R-180M	18	±20%	1KHz,0.3V	69MAX	3.10	2.60	180
MDRH104R-220M	22	±20%	1KHz,0.3V	73MAX	2.90	2.50	220
MDRH104R-220M	27	±20%	1KHz,0.3V	88MAX	2.60	2.30	270
MDRH104R-330M	33	±20%	1KHz,0.3V	93MAX	2.30	2.20	330
MDRH104R-390M	33	±20%	1KHz,0.3V	127MAX	2.20	2.00	390
MDRH104R-470M	47	±20%	1KHz,0.3V	128MAX	2.10	1.90	470



MDRH104R-560M	56	±20%	1KHz,0.3V	188MAX	1.65	1.50	560
MDRH104R-680M	68	±20%	1KHz,0.3V	213MAX	1.50	1.42	680
MDRH104R-820M	82	±20%	1KHz,0.3V	283MAX	1.45	1.30	820
MDRH104R-101M	100	±20%	1KHz,0.3V	304MAX	1.35	1.25	101
MDRH104R-121M	330	±20%	1KHz,0.3V	375MAX	1.20	1.08	121
MDRH104R-151M	330	±20%	1KHz,0.3V	506MAX	1.15	0.85	151
MDRH104R-181M	330	±20%	1KHz,0.3V	568MAX	1.00	0.75	181
MDRH104R-221M	330	±20%	1KHz,0.3V	756MAX	0.92	0.70	221
MDRH104R-271M	330	±20%	1KHz,0.3V	853MAX	0.84	0.55	271
MDRH104R-331M	330	±20%	1KHz,0.3V	1090MAX	0.52	0.52	331

Isat: Direct current at which the inductance drops approximate 30% from its value without current.

Irms: Direct current when the temperature of the product rise( $\Delta T=40^{\circ}C$ ) from  $20^{\circ}C$  ambient.

### MDRH105R

MING - CI	Inductance	Percent	L Test	DC Resistance	Rated Current	Rated Current	Marking
P/N	L( $\mu H$ )	Tolerance	Frequency	DCR (m $\Omega$ )	Isat(A)	Irms(A)	
MDRH105R-0R8M	0.8	±20%	100KHz,0.3V	4.3MAX	13.50	9.50	0R8
MDRH105R-1R5M	1.5	±20%	100KHz,0.3V	5.8MAX	10.50	8.30	1R5
MDRH105R-2R2M	2.2	±20%	100KHz,0.3V	7.2MAX	9.25	7.50	2R2
MDRH105R-3R3M	3.3	±20%	100KHz,0.3V	10.4MAX	7.80	6.50	3R3
MDRH105R-4R7M	4.7	±20%	100KHz,0.3V	12.3MAX	6.40	6.10	4R7
MDRH105R-6R8M	6.8	±20%	100KHz,0.3V	18MAX	5.40	5.40	6R8
MDRH105R-8R2M	8.2	±20%	100KHz,0.3V	20MAX	4.85	5.00	8R2
MDRH105R-100M	10	±20%	1KHz,0.3V	26MAX	4.45	4.50	100
MDRH105R-120M	12	±20%	1KHz,0.3V	33MAX	4.00	3.80	120
MDRH105R-150M	15	±20%	1KHz,0.3V	41MAX	3.60	3.40	150
MDRH105R-180M	18	±20%	1KHz,0.3V	46MAX	3.20	3.10	180
MDRH105R-220M	22	±20%	1KHz,0.3V	61MAX	2.95	2.90	220
MDRH105R-270M	27	±20%	1KHz,0.3V	69MAX	2.70	2.60	270
MDRH105R-330M	33	±20%	1KHz,0.3V	84MAX	2.40	2.50	330
MDRH105R-390M	39	±20%	1KHz,0.3V	106MAX	2.30	2.25	390
MDRH105R-470M	47	±20%	1KHz,0.3V	130MAX	2.00	2.00	470
MDRH105R-560M	56	±20%	1KHz,0.3V	149MAX	1.90	1.90	560
MDRH105R-680M	68	±20%	1KHz,0.3V	201MAX	1.65	1.60	680
MDRH105R-820M	82	±20%	1KHz,0.3V	227MAX	1.50	1.45	820
MDRH105R-101M	100	±20%	1KHz,0.3V	253MAX	1.35	1.35	101
MDRH105R-121M	120	±20%	1KHz,0.3V	303MAX	1.28	1.18	121
MDRH105R-151M	150	±20%	1KHz,0.3V	370MAX	1.12	1.10	151
MDRH105R-181M	180	±20%	1KHz,0.3V	419MAX	1.04	1.00	181
MDRH105R-221M	220	±20%	1KHz,0.3V	500MAX	0.94	0.94	221
MDRH105R-271M	270	±20%	1KHz,0.3V	672MAX	0.84	0.80	271
MDRH105R-331M	330	±20%	1KHz,0.3V	812MAX	0.75	0.73	331
MDRH105R-391M	390	±20%	1KHz,0.3V	953MAX	0.70	0.70	390
MDRH105R-471M	470	±20%	1KHz,0.3V	1289MAX	0.60	0.54	471

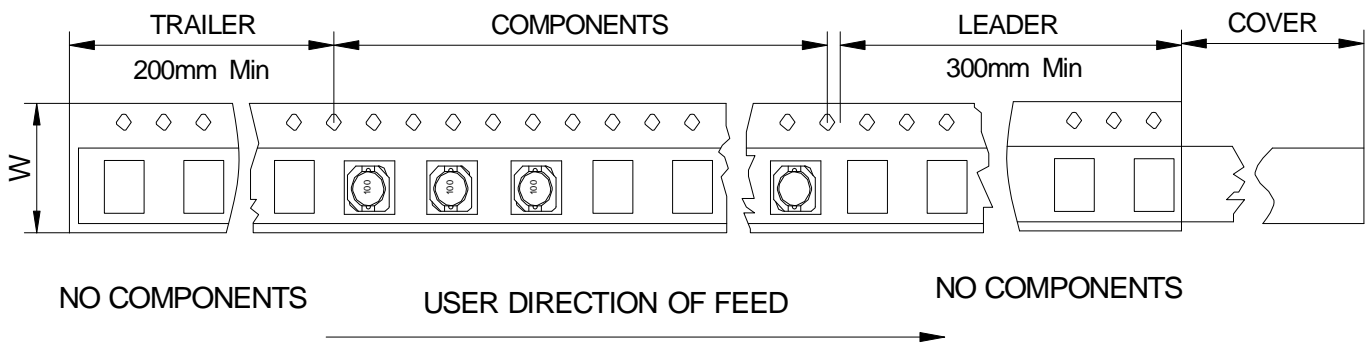


MDRH105R-561M	560	±20%	1KHz,0.3V	1430MAX	0.54	0.52	561
MDRH105R-681M	680	±20%	1KHz,0.3V	1599MAX	0.52	0.51	681
MDRH105R-821M	820	±20%	1KHz,0.3V	1768MAX	0.50	0.48	821
MDRH105R-102M	1000	±20%	1KHz,0.3V	1989MAX	0.48	0.42	102

Isat: Direct current at which the inductance drops approximate 30% from its value without current.

Irms: Direct current when the temperature of the product rise( $\Delta T=40^{\circ}C$ ) from 20°C ambient.

### Taping Dimension 包装尺寸



Series	Qty per Reel	Reel Size	Reel Box	Outer Box
MDRH103R	1000PCS	13Inch*24width	2000PCS(340*340*75mm)	6000PCS(358*358*250mm)
MDRH104R	800PCS	13Inch*24width	1600PCS(340*340*75mm)	4800PCS(358*358*250mm)
MDRH105R	500PCS	13Inch*24width	1000PCS(340*340*75mm)	3000PCS(358*358*250mm)