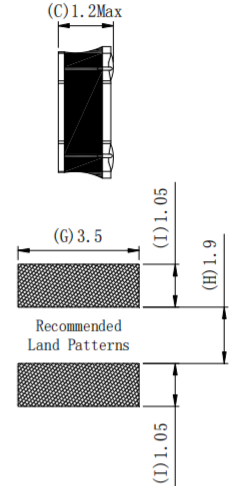
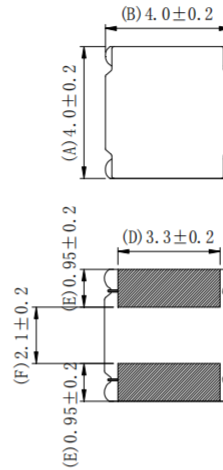


## FEATURES

- RoHS compliant
- Small size (4.0\*4.0mm), low profile (Height: 1.2mm Max)
- Surface mount design
- Magnetic shield construction with magnetic powder resin
- Good EMI
- Inductance range from 0.33uH to 27uH
- Tape & reel packing
- UL94V-0
- Solder profile acc. J-STD-020D

## APPLICATIONS

- DC-DC Converters
- Cell phones
- LCD displays
- Office automotive



Dimensions are in mm

Part number	L0 μH	DCR(Ω)		Isat(A)		Irms(A)	
	±20%	MAX	TYP	TYP	MAX	TYP	MAX
MDRH4012SGR33M	0.33	0.031	0.026	5.50	6.30	2.90	3.35
MDRH4012SGR47M	0.47	0.032	0.027	3.50	4.20	2.90	3.20
MDRH4012SGR82M	0.82	0.042	0.035	3.00	3.50	2.50	2.50
MDRH4012SG1R0M	1.00	0.050	0.042	2.80	3.30	2.20	2.90
MDRH4012SG1R5M	1.50	0.050	0.042	2.10	2.20	2.20	2.50
MDRH3010SG1R8M	1.80	0.660	0.055	2.10	2.40	2.00	2.30
MDRH4012SG2R2M	2.20	0.066	0.055	1.70	1.80	2.00	2.30
MDRH4012SG2R7M	2.70	0.084	0.070	1.90	2.20	1.70	2.00
MDRH4012SG3R3M	3.30	0.084	0.070	1.40	1.70	1.70	2.00
MDRH4012SG3R6M	3.60	0.090	0.075	1.20	1.60	1.70	2.00
MDRH4012SG4R3M	4.30	0.108	0.090	1.20	1.50	1.50	1.80
MDRH4012SG4R7M	4.70	0.108	0.090	1.20	1.30	1.50	1.80
MDRH4012SG5R1M	5.10	0.132	0.110	1.20	1.40	1.40	1.60
MDRH4012SG5R6M	5.60	0.132	0.11	1.10	1.40	1.40	1.60
MDRH4012SG6R8M	6.80	0.150	0.125	0.90	1.10	1.30	1.60
MDRH4012SG100M	10.0	0.204	0.17	0.80	0.90	1.10	1.30
MDRH4012SG120M	12.0	0.312	0.260	0.85	1.00	0.90	1.00
MDRH4012SG150M	15.0	0.312	0.260	0.65	0.80	0.90	1.00
MDRH4012SG180M	18.0	0.432	0.360	0.65	0.80	0.78	0.90
MDRH4012SG220M	22.0	0.460	0.380	0.50	0.65	0.78	0.90
MDRH4012SG270M	27.0	0.672	0.560	0.50	0.60	0.63	0.73

## ABSOLUTE MAXIMUM RATINGS

Operating temperature rang -55°C to + 125°C

(Including self te perature rise)

Storage temperature rang -40°C to + 125°C

## SOLDERING INFORMATION

Peak reflow temperature 265°C

Pin finish tin

## PACKAGING INFORMATION

Tape & Reel

## Notes

- Electrical specification at 25°C .
- Inductance tested at 1MHz , 0.25V rms .
- Irms is the current that caused a approximate 40°C temperature rise from 25°C ambient.
- Isat is the DC current at which inductance drop approximately 30% from its value without current.
- The part temperature(ambient+temp .rise)should not exceed 125°C under worst case operating conditions .Circuit design , component placement, PCB trace size and thickness ,airflow and other cooling provisions all affect the part temperature . Part temperature should be verified in the end application

- Electrical specification at 25°C.
- Inductance tested at 100 kHz, 0.25Vrms.
- The DCR value is typical.
- Isat is the DC current at which inductance drop 30%(Max) from its value without current.
- Irms is the current that caused a approx 40P temperature rise from 25°C ambient.