

# SMT Shielded Power Inductors

## GSRH103R / GSRH104R / GSRH105R

### Features (特長)

- Magnetically shielded construction (閉磁路構造設計)
- Compact and thin (輕便薄小)
- Wire burst resistant due to special construction. (斷線對策構造)

### Applications (用途)

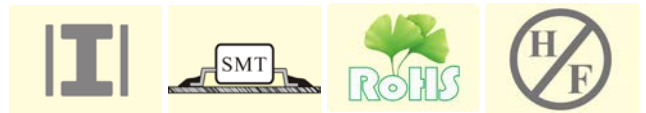
- DC-DC converter transformer, LCD TV, Notebook, VCR Camera.  
(直流轉換變壓器、液晶電視、筆記型電腦、攝影機)



### Product Identification (產品識別)

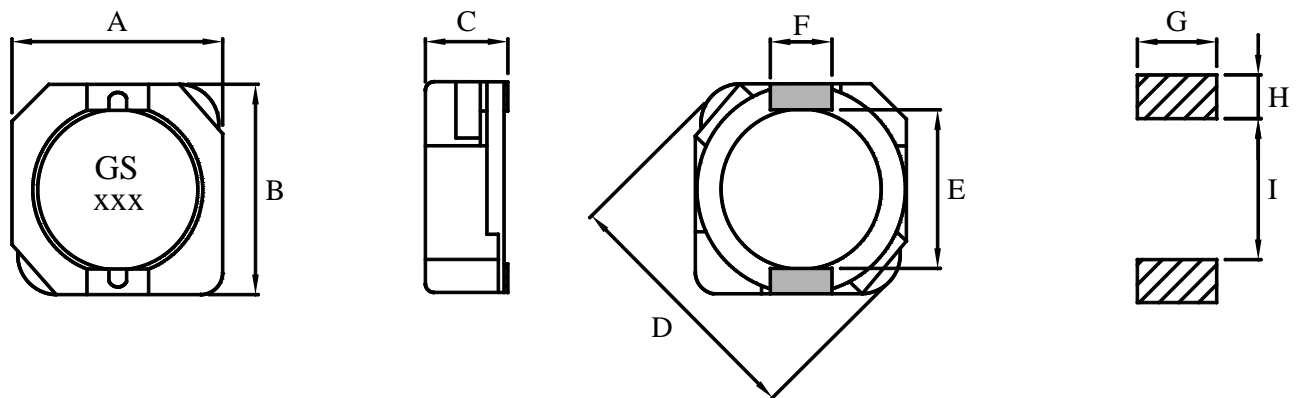
GSRH103R - \_\_\_\_\_ (Ex. GSRH103R-100M)

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1. SMT Shielded Power Inductors (閉磁式功率電感)  
(GSRH103R, GSRH104R, GSRH105R)
2. Inductance (電感值)
3. Tolerance (誤差值) ( 參照表 M 20%, N 30% )

### Configurations & Dimensions (結構圖及規格尺寸)



Unit In mm

Type (型式)	A (max)	B (max)	C (max)	D (max)	E ±0.3	F ±0.1	G	H	I
GSRH103R	10.3	10.4	3.0	13.5	7.7	3.0	3.6	1.7	7.3
GSRH104R	10.3	10.4	4.0	13.5	7.7	3.0	3.6	1.7	7.3
GSRH105R	10.3	10.4	5.0	13.5	7.7	3.0	3.6	1.7	7.3

♣Design as Customer's Requested Specifications. (可依客戶特殊需求設計)

# SMT Shielded Power Inductors

## GSRH103R

Electrical Characteristics for GSRH103R Series [GSRH103R 系列電子特性規格]

Part Number 產品料號	Inductance ( $\mu$ H) 電感值 (L)	Test Freq. (KHz) 測試頻率	DCR ( $\Omega$ ) (max) 直流阻抗	Isat (A) (max) 定格電流	Irms (A) (max) 溫昇電流
GSRH103R – 100M	10.00	100	0.0581	2.70	2.80
GSRH103R – 120M	12.00	100	0.0721	2.25	2.10
GSRH103R – 150M	15.00	100	0.0865	2.22	2.05
GSRH103R – 180M	18.00	100	0.1161	1.90	1.80
GSRH103R – 220M	22.00	100	0.1454	1.78	1.60
GSRH103R – 270M	27.00	100	0.1759	1.63	1.50
GSRH103R – 330M	33.00	100	0.2134	1.46	1.35
GSRH103R – 390M	39.00	100	0.2689	1.32	1.25
GSRH103R – 470M	47.00	100	0.2986	1.18	1.20
GSRH103R – 560M	56.00	100	0.3358	1.10	1.15
GSRH103R – 680M	68.00	100	0.4513	1.04	0.98
GSRH103R – 820M	82.00	100	0.5138	0.94	0.80
GSRH103R – 101M	100.00	100	0.7000	0.84	0.70
GSRH103R – 121M	120.00	100	0.7650	0.76	0.65
GSRH103R – 151M	150.00	100	0.8763	0.70	0.51

※Test Freq. : 100KHz / 1V.

※Operating Temp. :  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

※Inductance drop=25% typ. at Isat.

※ $\Delta T=40^{\circ}\text{C}$  rise at Irms.

※Storage Temperature&Humidity :  $\leq 40^{\circ}\text{C}$  & 70% RH maximum

# SMT Shielded Power Inductors

## GSRH104R

Electrical Characteristics for GSRH104R Series [GSRH104R 系列電子特性規格]

Part Number 產品料號	Inductance ( $\mu$ H) 電感值 (L)	Test Freq. (KHz) 測試頻率	DCR ( $\Omega$ ) (max) 直流阻抗	Isat (A) (max) 定格電流	Irms (A) (max) 溫昇電流
GSRH104R – 1R3N	1.30	100	0.0081	10.00	6.50
GSRH104R – 2R5N	2.50	100	0.010	7.50	6.10
GSRH104R – 3R8N	3.80	100	0.013	6.00	5.50
GSRH104R – 5R2N	5.20	100	0.022	5.50	5.40
GSRH104R – 7R0N	7.00	100	0.027	4.80	4.50
GSRH104R – 100M	10.00	100	0.035	4.40	3.80
GSRH104R – 150M	15.00	100	0.050	3.60	3.10
GSRH104R – 220M	22.00	100	0.073	2.90	2.50
GSRH104R – 330M	33.00	100	0.093	2.30	2.20
GSRH104R – 470M	47.00	100	0.128	2.10	1.90
GSRH104R – 680M	68.00	100	0.213	1.50	1.42
GSRH104R – 101M	100.00	100	0.304	1.35	1.25
GSRH104R – 151M	150.00	100	0.506	1.15	0.85
GSRH104R – 221M	220.00	100	0.756	0.92	0.70
GSRH104R – 331M	330.00	100	1.090	0.70	0.52

※Test Freq. : 100KHz / 1V.

※Operating Temp. :  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

※Inductance drop=35% typ. at Isat.

※ $\Delta T=40^{\circ}\text{C}$  rise at Irms.

※Storage Temperature&Humidity :  $\leq 40^{\circ}\text{C}$  & 70% RH maximum

# SMT Shielded Power Inductors

## GSRH105R

Electrical Characteristics for GSRH105R Series [GSRH105R 系列電子特性規格]

Part Number 產品料號	Inductance ( $\mu$ H) 電感值 (L)	Test Freq. (KHz) 測試頻率	DCR ( $\Omega$ ) (max) 直流阻抗	Isat (A) (max) 定格電流	Irms (A) (max) 溫昇電流
GSRH105R – 100M	10.00	100	0.026	4.45	4.50
GSRH105R – 120M	12.00	100	0.033	4.00	3.80
GSRH105R – 150M	15.00	100	0.041	3.60	3.40
GSRH105R – 180M	18.00	100	0.046	3.20	3.10
GSRH105R – 220M	22.00	100	0.061	2.95	2.90
GSRH105R – 270M	27.00	100	0.069	2.70	2.60
GSRH105R – 330M	33.00	100	0.084	2.40	2.50
GSRH105R – 390M	39.00	100	0.106	2.30	2.25
GSRH105R – 470M	47.00	100	0.130	2.00	2.00
GSRH105R – 560M	56.00	100	0.149	1.90	1.90
GSRH105R – 680M	68.00	100	0.201	1.65	1.60
GSRH105R – 820M	82.00	100	0.227	1.50	1.45
GSRH105R – 101M	100.00	100	0.253	1.35	1.35
GSRH105R – 121M	120.00	100	0.303	1.28	1.18
GSRH105R – 151M	150.00	100	0.370	1.12	1.10
GSRH105R – 181M	180.00	100	0.419	1.04	1.00
GSRH105R – 221M	220.00	100	0.500	0.94	0.94
GSRH105R – 271M	270.00	100	0.672	0.84	0.80
GSRH105R – 331M	330.00	100	0.812	0.75	0.73
GSRH105R – 391M	390.00	100	0.953	0.70	0.70
GSRH105R – 471M	470.00	100	1.290	0.60	0.54
GSRH105R – 561M	560.00	100	1.430	0.54	0.52
GSRH105R – 681M	680.00	100	1.600	0.52	0.51
GSRH105R – 821M	820.00	100	1.770	0.48	0.50
GSRH105R – 102M	1000.00	100	1.990	0.42	0.48

※Test Freq. : 100KHz / 1V.

※Operating Temp. :  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

※Inductance drop=35% typ. at Isat.

※ $\Delta T=40^{\circ}\text{C}$  rise at Irms.

※Storage Temperature&Humidity :  $\leq 40^{\circ}\text{C}$  & 70% RH maximum