

# SMT Shielded Power Inductors

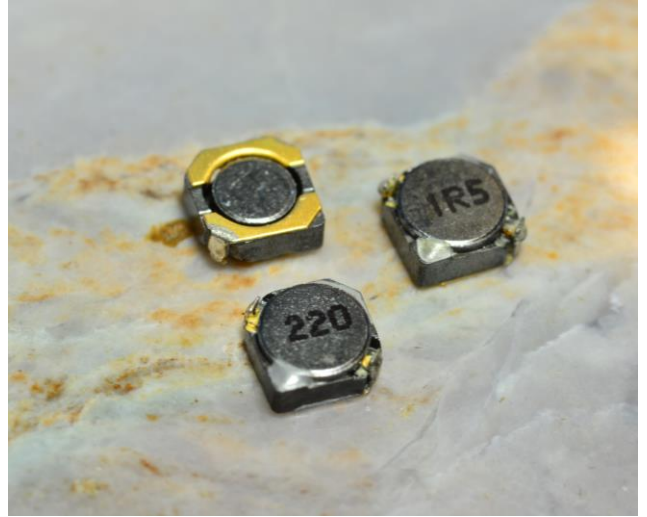
## GSRH2D11 / GSRH2D14 / GSRH2D18 / GSRH3D11 / GSRH3D14LD / GSRH3D14HP GSRH3D16 / GSRH3D28

### Features (特長)

- Magnetically shielded construction  
(閉磁路構造設計)
- Compact and thin (輕便薄小)
- Large Current and Low DCR  
(大電流低直流阻抗)

### Applications (用途)

- DC-DC converter of portable equipment.  
(攜帶機器之直流轉換器)
- Camcorder, LCD television set, Digital camera, P.D.A., Notebook.  
(攝影機、液晶電視、數位相機、P.D.A.、筆記型電腦)



### Product Identification (產品識別)

GSRH2D11 - \_\_\_\_\_ (Ex. GSRH2D11-1R5N)

1                      2                      3

1. SMT Shielded Power Inductors (閉磁式功率電感)

(GSRH2D11, GSRH2D14, GSRH2D18, GSRH3D11, GSRH3D14LD, GSRH3D14HP, GSRH3D16, GSRH3D28)

2. Inductance (電感值)

3. Tolerance (誤差值) ( 參照表 K 10%, L 15%, M 20%, N 30% )

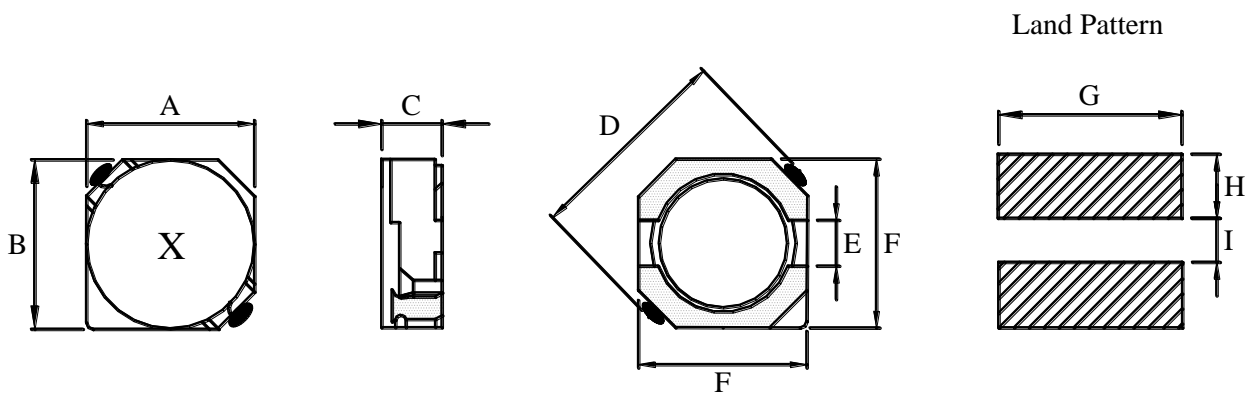


# SMT Shielded Power Inductors

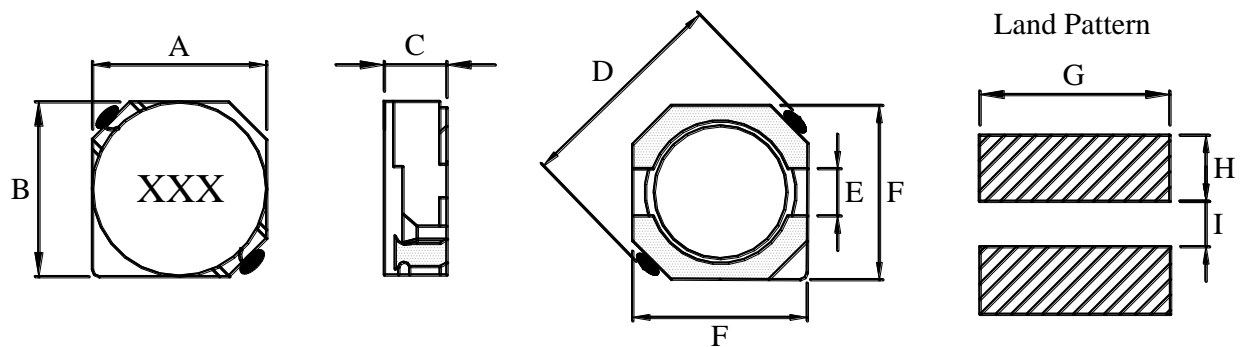
## GSRH2D11 / GSRH2D14 / GSRH2D18 / GSRH3D11 / GSRH3D14LD / GSRH3D14HP GSRH3D16 / GSRH3D28

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

GSRH2D11 / GSRH2D14 / GSRH2D18 / GSRH3D11 / GSRH3D14LD / GSRH3D14HP / GSRH3D28



GSRH3D16



Unit In mm

Type (型式)	A (max)	B (max)	C (max)	D (max)	E (Ref.)	F	G	H	I
GSRH2D11	3.2	3.2	1.30	4.3	1.0	3.1	3.4	1.1	1.2
GSRH2D14	3.2	3.2	1.55	4.3	1.0	3.1	3.4	1.1	1.2
GSRH2D18	3.2	3.2	2.00	4.3	1.0	3.1	3.4	1.1	1.2
GSRH3D11	4.0	4.0	1.2	5.2	1.2	3.7	4.3	1.7	1.0
GSRH3D14LD	4.0	4.0	1.5	5.2	1.2	3.7	4.3	1.7	1.0
GSRH3D14HP	4.0	4.0	1.5	5.2	1.2	3.7	4.3	1.7	1.0
GSRH3D16	4.0	4.0	1.8	5.2	1.2	3.7	4.3	1.7	1.0
GSRH3D28	4.0	4.0	3.0	5.2	1.2	3.7	4.3	1.7	1.0

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

# SMT Shielded Power Inductors

## GSRH2D11

Electrical Characteristics for GSRH2D11 Series [GSRH2D11 系列電子特性規格]

Part Number 產品料號	MARK 捺印	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
GSRH2D11 - 1R5N	B	1.50	100	0.068	0.90	1.48
GSRH2D11 - 2R2N	D	2.20	100	0.098	0.78	1.27
GSRH2D11 - 3R3N	F	3.30	100	0.123	0.60	1.02
GSRH2D11 - 4R7N	H	4.70	100	0.170	0.50	0.88
GSRH2D11 - 6R8N	J	6.80	100	0.260	0.44	0.80
GSRH2D11 - 100N	L	10.00	100	0.400	0.35	0.65

※Test Freq. : 100KHz / 0.1V.

※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

## GSRH2D14

Electrical Characteristics for GSRH2D14 Series [GSRH2D14 系列電子特性規格]

Part Number 產品料號	MARK 捺印	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
GSRH2D14 - 1R5N	B	1.50	100	0.063	1.800	2.00
GSRH2D14 - 1R8N	C	1.80	100	0.075	1.650	1.80
GSRH2D14 - 2R2N	D	2.20	100	0.094	1.500	1.60
GSRH2D14 - 2R7N	E	2.70	100	0.106	1.350	1.40
GSRH2D14 - 3R3N	F	3.30	100	0.125	1.200	1.24
GSRH2D14 - 3R9N	G	3.90	100	0.138	1.100	1.12
GSRH2D14 - 4R7N	H	4.70	100	0.169	1.000	1.00
GSRH2D14 - 5R6N	I	5.60	100	0.188	0.945	0.98
GSRH2D14 - 6R8N	J	6.80	100	0.213	0.850	0.92
GSRH2D14 - 8R2N	K	8.20	100	0.281	0.800	0.80
GSRH2D14 - 100N	L	10.00	100	0.294	0.700	0.76
GSRH2D14 - 120N	M	12.00	100	0.394	0.620	0.64

※Test Freq. : 100KHz / 0.1V.

※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

## GSRH2D18

Electrical Characteristics for GSRH2D18 Series [GSRH2D18 系列電子特性規格]

Part Number 產品料號	MARK 捺印	Inductance ( $\mu$ H) 電感值 (L)	Test Freq. (KHz) 測試頻率	DCR ( $\Omega$ ) (max) 直流阻抗	IDC (A) (max) 定格電流
GSRH2D18 – 2R2N	C	2.20	100	0.043	0.85
GSRH2D18 – 3R3N	D	3.30	100	0.060	0.77
GSRH2D18 – 4R7N	F	4.70	100	0.081	0.63
GSRH2D18 – 6R8N	I	6.80	100	0.108	0.57
GSRH2D18 – 100N	K	10.00	100	0.201	0.45
GSRH2D18 – 150N	M	15.00	100	0.227	0.35
GSRH2D18 – 220N	O	22.00	100	0.331	0.30
GSRH2D18 – 330N	Q	33.00	100	0.481	0.23

※Test Freq. : 100KHz / 0.1V.

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

※Inductance drop = 35% typ. at IDC.

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

## GSRH3D11

Electrical Characteristics for GSRH3D11 Series [GSRH3D11 系列電子特性規格]

Part Number 產品料號	MARK 捺印	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
GSRH3D11 - 2R7N	U	2.70	100	0.078	0.53	1.82
GSRH3D11 - 4R7N	E	4.70	100	0.123	0.40	1.38
GSRH3D11 - 6R8N	F	6.80	100	0.180	0.34	1.05
GSRH3D11 - 8R2N	V	8.20	100	0.204	0.32	0.95
GSRH3D11 - 100M	G	10.00	100	0.240	0.28	0.90
GSRH3D11 - 120M	H	12.00	100	0.276	0.25	0.81
GSRH3D11 - 150M	I	15.00	100	0.372	0.23	0.68
GSRH3D11 - 180M	J	18.00	100	0.468	0.21	0.58
GSRH3D11 - 220M	K	22.00	100	0.540	0.19	0.53
GSRH3D11 - 270M	L	27.00	100	0.726	0.17	0.48
GSRH3D11 - 330M	M	33.00	100	0.822	0.15	0.41
GSRH3D11 - 390M	N	39.00	100	0.942	0.14	0.40

※Test Freq. : 100KHz / 0.1V.

※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

## GSRH3D14LD

Electrical Characteristics for GSRH3D14LD Series [GSRH3D14LD 系列電子特性規格]

Part Number 產品料號	MARK 捺印	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
GSRH3D14LD - 1R2N	LA	1.20	100	0.038	1.500	2.70
GSRH3D14LD - 1R5N	LB	1.50	100	0.048	1.350	2.40
GSRH3D14LD - 2R2N	LC	2.20	100	0.055	1.150	2.20
GSRH3D14LD - 2R7N	LD	2.70	100	0.068	1.050	1.90
GSRH3D14LD - 3R3N	LE	3.30	100	0.077	0.950	1.60
GSRH3D14LD - 3R9N	LF	3.90	100	0.096	0.800	1.50
GSRH3D14LD - 4R7N	LG	4.70	100	0.105	0.750	1.45
GSRH3D14LD - 5R6N	LH	5.60	100	0.159	0.700	1.10
GSRH3D14LD - 6R8N	LI	6.80	100	0.173	0.600	1.05
GSRH3D14LD - 8R2N	LJ	8.20	100	0.175	0.520	1.00
GSRH3D14LD - 100M	LK	10.00	100	0.220	0.500	1.00
GSRH3D14LD - 120M	LL	12.00	100	0.270	0.450	0.80
GSRH3D14LD - 150M	LM	15.00	100	0.302	0.400	0.75
GSRH3D14LD - 220M	LO	22.00	100	0.447	0.350	0.60
GSRH3D14LD - 330M	LQ	33.00	100	0.848	0.300	0.40
GSRH3D14LD - 470M	LS	47.00	100	1.080	0.250	0.35

※Test Freq. : 100KHz / 0.1V.

※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

## GSRH3D14HP

Electrical Characteristics for GSRH3D14HP Series [GSRH3D14HP 系列電子特性規格]

Part Number 產品料號	MARK 捺印	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
GSRH3D14HP - 1R5N	HB	1.5	100	0.076	2.60	1.85
GSRH3D14HP - 2R4N	HC	2.4	100	0.129	2.00	1.32
GSRH3D14HP - 3R2N	HE	3.2	100	0.139	1.80	1.25
GSRH3D14HP - 4R7N	HG	4.7	100	0.214	1.45	1.04
GSRH3D14HP - 6R8N	HH	6.8	100	0.290	1.20	0.84
GSRH3D14HP - 100M	HJ	10.0	100	0.440	1.00	0.67
GSRH3D14HP - 150M	HL	15.0	100	0.650	0.80	0.50
GSRH3D14HP - 220M	HN	22.0	100	0.830	0.65	0.48

- ※Test Freq. : 100KHz / 0.1V.
- ※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

## GSRH3D16

Electrical Characteristics for GSRH3D16 Series [GSRH3D16 系列電子特性規格]

Part Number 產品料號	MARK 捺印	Inductance ( $\mu$ H) 電感值 (L)	Test Freq. (KHz) 測試頻率	DCR ( $\Omega$ ) (max) 直流阻抗	IDC (A) (max) 定格電流
GSRH3D16 - 1R5N	1R5	1.50	100	0.052	1.55
GSRH3D16 - 2R2N	2R2	2.20	100	0.072	1.20
GSRH3D16 - 3R3N	3R3	3.30	100	0.085	1.10
GSRH3D16 - 4R7N	4R7	4.70	100	0.105	0.90
GSRH3D16 - 6R8N	6R8	6.80	100	0.170	0.73
GSRH3D16 - 100N	100	10.00	100	0.210	0.55
GSRH3D16 - 150N	150	15.00	100	0.295	0.45
GSRH3D16 - 220N	220	22.00	100	0.430	0.40
GSRH3D16 - 330N	330	33.00	100	0.675	0.32

- ※Test Freq. : 100KHz / 0.1V.
- ※Operating Temp. :  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- ※Inductance drop = 35% typ. at IDC.
- ※Storage Temperature&Humidity :  $\leq 40^{\circ}\text{C}$  & 70% RH maximum

# SMT Shielded Power Inductors

## GSRH3D28

Electrical Characteristics for GSRH3D28 Series [GSRH3D28 系列電子特性規格]

Part Number 產品料號	MARK 捺印	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
GSRH3D28 - 3R3N	D	3.30	100	0.0721	2.00	1.85
GSRH3D28 - 4R7N	E	4.70	100	0.0883	1.65	1.62
GSRH3D28 - 6R8N	F	6.80	100	0.1190	1.24	1.32
GSRH3D28 - 100M	G	10.00	100	0.1450	1.05	1.18
GSRH3D28 - 150M	I	15.00	100	0.2130	0.90	1.02
GSRH3D28 - 220M	K	22.00	100	0.3350	0.76	0.74
GSRH3D28 - 330M	M	33.00	100	0.4810	0.58	0.63
GSRH3D28 - 470M	O	47.00	100	0.5990	0.48	0.56

※Test Freq. : 100KHz / 0.1V.

※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