

# SMT Shielded Power Inductors

## GSDIA5020 / GSDIA5030 / GSDIA5040

## GSDIA6028 / GSDIA6045 / GSDIA8040

## GSCR6045 / GSCR8040

### 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)

**GSCR6045** - \_\_\_\_\_ (Ex. GSCR6045-2R2N)

1                      2                      3

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

(GSDIA5020, GSDIA5030, GSDIA5040, GSDIA6028, GSDIA6045, GSDIA8040, GSCR6045, GSCR8040)

2. Inductance (電感值)

3. Tolerance (誤差值) ( 參照表 M 20%, N 30% )



# SMT Shielded Power Inductors

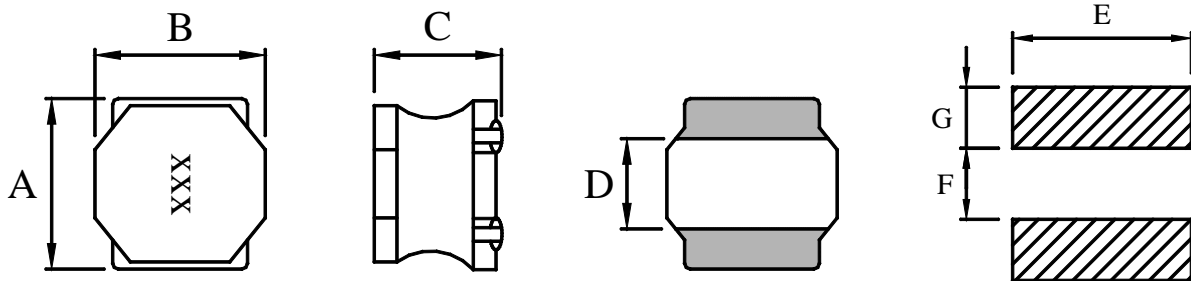
## GSDIA5020 / GSDIA5030 / GSDIA5040

## GSDIA6028 / GSDIA6045 / GSDIA8040

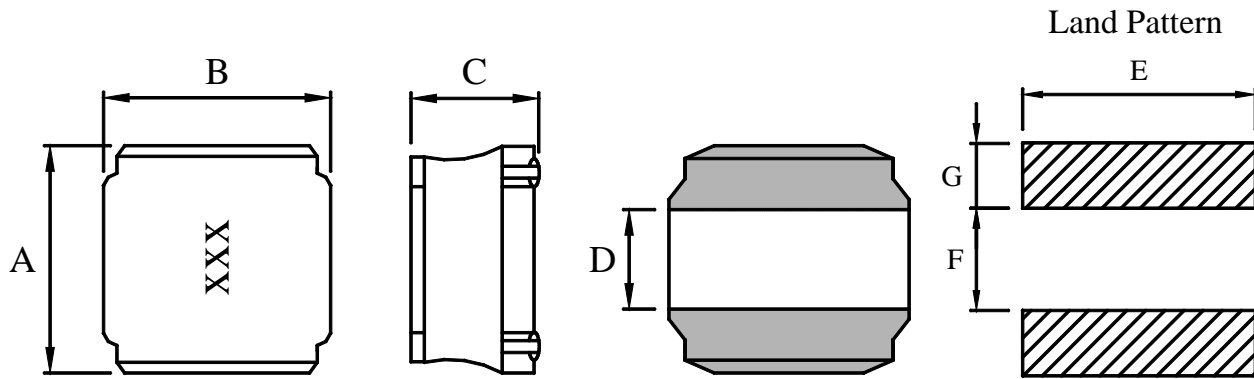
## GSCR6045 / GSCR8040

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

GSDIA5020 / GSDIA5030 / GSDIA5040 / GSCR6045



GSDIA6028 / GSDIA6045 / GSDIA8040 / GSCR8040



Unit In mm

Type(型式)	A	B	C (max)	D (Typ)	E	F	G
GSDIA5020	5.0±0.2	5.0±0.2	2.0	2.0	5.2	2.1	1.55
GSDIA5030	5.0±0.4	5.0±0.4	3.0	2.0	5.2	2.1	1.55
GSDIA5040	5.0±0.4	5.0±0.4	4.0	2.0	5.2	2.1	1.55
GSDIA6028	6.0±0.4	6.0±0.4	2.8	2.5	6.3	2.0	2.15
GSDIA6045	6.0±0.4	6.0±0.4	4.5	2.5	6.3	2.0	2.15
GSDIA8040	8.0±0.4	8.0±0.4	4.0	3.5	8.2	3.6	2.30
GSCR6045	6.0±0.3	6.0±0.3	4.5	3.0	6.3	2.5	2.15
GSCR8040	8.0±0.3	8.0±0.3	4.5	3.5	8.2	3.6	2.30

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

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## GSCR6045

Electrical Characteristics for GSCR6045 Series [GSCR6045 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 (m $\Omega$ ) $\pm$ 30% 直流阻抗	Isat (A) (max) 定格電流	Irms (A) (max) 溫昇電流
GSCR6045 – 2R2N	2.2	100	21.0	6.0	3.5
GSCR6045 – 4R7N	4.7	100	31.0	4.0	3.0
GSCR6045 – 6R8N	6.8	100	40.0	3.8	2.8
GSCR6045 – 100M	10.0	100	47.0	3.0	2.5
GSCR6045 – 150M	15.0	100	77.0	2.3	1.9
GSCR6045 – 220M	22.0	100	115.0	1.9	1.5
GSCR6045 – 330M	33.0	100	145.0	1.5	1.4
GSCR6045 – 470M	47.0	100	220.0	1.3	1.1
GSCR6045 – 680M	68.0	100	330.0	1.0	0.9
GSCR6045 – 101M	100.0	100	500.0	0.8	0.7

※Test Freq. : 100KHz / 1V.

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

※Inductance drop = 30% typ. at Isat.

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

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

## GSCR8040

Electrical Characteristics for GSCR8040 Series [GSCR8040 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 (m $\Omega$ ) (max) 直流阻抗	Isat (A) (max) 定格電流	Irms (A) (max) 溫昇電流
GSCR8040 – 4R7N	4.7	100	34.0	4.7	4.1
GSCR8040 – 8R2N	8.2	100	45.5	4.0	3.8
GSCR8040 – 100M	10.0	100	52.0	3.4	3.1
GSCR8040 – 150M	15.0	100	68.0	2.7	2.4
GSCR8040 – 220M	22.0	100	86.0	2.2	2.2
GSCR8040 – 330M	33.0	100	130.0	1.9	1.7
GSCR8040 – 470M	47.0	100	195.0	1.5	1.4
GSCR8040 – 560M	56.0	100	240.5	1.3	1.2
GSCR8040 – 680M	68.0	100	299.0	1.2	1.1
GSCR8040 – 101M	100.0	100	390.0	1.0	1.0

※Test Freq. : 100KHz / 1V.

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

※Inductance drop = 30% typ. at Isat.

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

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