

# SMT Shielded Power Inductors

## GSMPI0402N / GSMPI0703N / GSMPI0735N

## GSMPI1004N

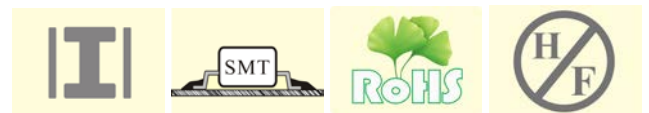
## GSMPC0402CA / GSMPC0703CA / GSMPC1004Z

### 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)

**GSMPI0402N** - \_\_\_\_ \_\_\_\_ (Ex. GSMPI0402N-100M、GSMPC0402CA)

1                      2            3

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

(GSMPI0402N,GSMPI0703N,GSMPI0735N,GSMPI1004N,GSMPC0402CA,GSMPC0703CA,GSMPC1004Z)

2. Inductance (電感值)

3. Tolerance (誤差值) ( 參照表 M 20% )

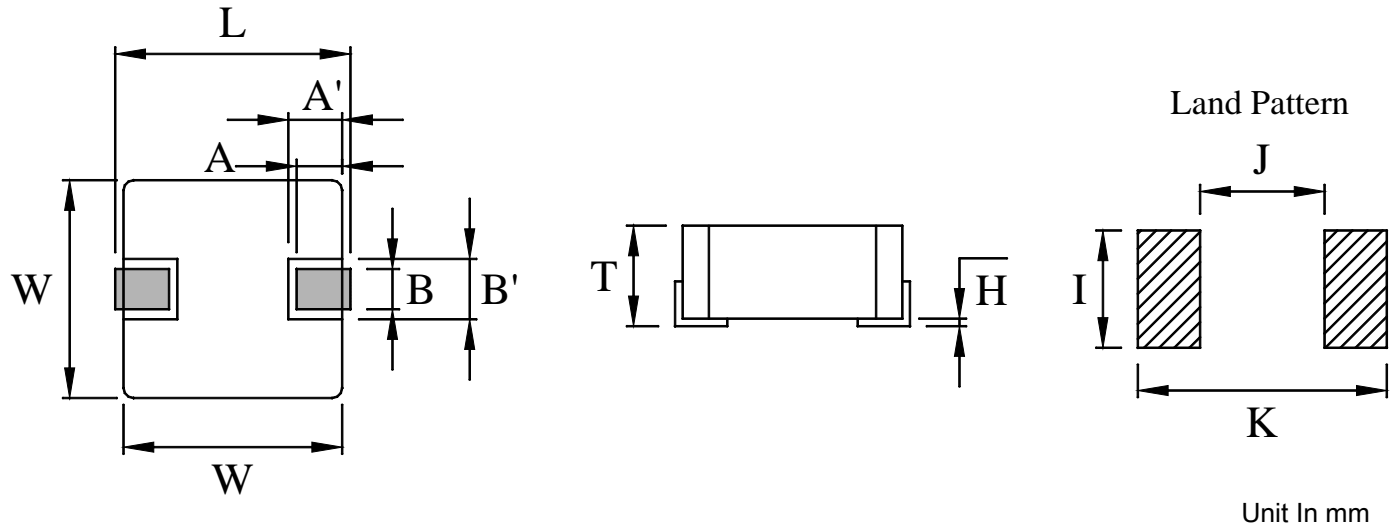
# SMT Shielded Power Inductors

## GSMPI0402N / GSMPI0703N / GSMPI0735N

## GSMPI1004N

## GSMPC0402CA / GSMPC0703CA / GSMPC1004Z

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



Type (型式)	L	W	T (max)	A	A'	B	B'	H	I	J	K
GSMPI0402N	4.7(max)	4.0±0.20	2.0	1.0±0.3	1.4±0.2	0.6±0.1	1.2±0.2	0.30(max)	1.5	2.2	6.0
GSMPI0703N	7.6(max)	6.5±0.20	3.0	1.6±0.3	2.0±0.1	1.2±0.3	1.8±0.2	0.30(max)	2.5	3.0	8.5
GSMPI0735N	7.6(max)	6.5±0.20	3.5	1.5±0.3	2.0±0.1	1.2±0.3	1.8±0.2	0.30(max)	2.5	3.0	8.5
GSMPI1004N (R15~1R5)	11.5(max)	10.0±0.30	4.0	2.0±0.5	2.6±0.1	3.0±0.5	5.0±0.2	0.30(max)	7.3	5.4	13.6
GSMPI1004N (2R2~100)	11.5(max)	10.0±0.30	4.0	2.0±0.5	2.6±0.1	1.8±0.5	2.3±0.2	0.30(max)	4.1	5.4	13.6
GSMPC0402CA	4.4±0.35	4.2±0.25	2.0	0.8±0.3	1.0±0.1	2.0±0.3	2.5±0.3	0.15(Ref.)	2.5	2.2	5.2
GSMPC0703CA	7.3±0.3	6.6±0.20	3.0	1.6±0.3	2.0±0.1	3.0±0.3	3.6±0.2	0.15(Ref.)	3.5	3.7	8.4
GSMPC1004Z	11.5(max)	10.0±0.30	3.8±0.2	2.0±0.5	2.5±0.1	3.0±0.5	5.0±0.2	0.15(Ref.)	4.1	5.4	13.6

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

# SMT Shielded Power Inductors

## GSMPI0402N

Electrical Characteristics for GSMPI0402N Series [GSMPI0402N 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
GSMPI0402N – R22M	0.22	100	7.00	11.5	11.5
GSMPI0402N – R47M	0.47	100	12.00	10.0	7.0
GSMPI0402N – R56M	0.56	100	14.70	8.0	7.0
GSMPI0402N – R68M	0.68	100	17.00	7.0	6.3
GSMPI0402N – R82M	0.82	100	18.00	6.5	6.0
GSMPI0402N – 1R0M	1.00	100	21.50	6.0	5.0
GSMPI0402N – 1R2M	1.20	100	22.00	5.0	5.0
GSMPI0402N – 1R5M	1.50	100	29.00	5.0	5.1
GSMPI0402N – 2R2M	2.20	100	40.00	5.0	3.9
GSMPI0402N – 3R3M	3.30	100	70.00	4.3	3.3
GSMPI0402N – 4R7M	4.70	100	75.00	4.0	2.7
GSMPI0402N – 5R6M	5.60	100	90.00	3.5	2.4

## GSMPI0703N

Electrical Characteristics for GSMPI0703N Series [GSMPI0703N 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
GSMPI0703N – R22M	0.22	100	2.40	40.0	23.0
GSMPI0703N – R33M	0.33	100	3.40	30.0	18.0
GSMPI0703N – R36M	0.36	100	4.30	28.0	18.0
GSMPI0703N – R47M	0.47	100	4.50	27.0	17.0
GSMPI0703N – R56M	0.56	100	5.00	20.0	16.0
GSMPI0703N – R68M	0.68	100	5.00	20.0	16.0
GSMPI0703N – R82M	0.82	100	6.60	17.0	13.0
GSMPI0703N – 1R0M	1.00	100	7.00	15.0	13.0
GSMPI0703N – 1R1M	1.10	100	7.00	13.0	11.0
GSMPI0703N – 1R5M	1.50	100	10.00	13.0	11.0
GSMPI0703N – 2R2M	2.20	100	20.00	12.0	6.3
GSMPI0703N – 3R3M	3.30	100	24.00	10.0	6.0
GSMPI0703N – 4R7M	4.70	100	29.00	8.0	5.3
GSMPI0703N – 5R6M	5.60	100	45.00	6.0	5.0
GSMPI0703N – 6R8M	6.80	100	50.00	5.5	4.5
GSMPI0703N – 8R2M	8.20	100	54.00	5.0	4.5

※Test Freq. : 100KHz / 0.25V.

※Operating Temp. :  $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$

※Inductance drop = 20% 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

## GSMPI0735N

Electrical Characteristics for GSMPI0735N Series [GSMPI0735N 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
GSMPI0735N – 100M	10.00	100	60.00	5.50	3.50

## GSMPI1004N

Electrical Characteristics for GSMPI1004N Series [GSMPI1004N 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
GSMPI1004N – R22M	0.22	100	1.10	54.0	35.0
GSMPI1004N – R36M	0.36	100	1.30	41.0	34.0
GSMPI1004N – R47M	0.47	100	1.40	36.0	33.0
GSMPI1004N – R56M	0.56	100	1.80	36.0	25.0
GSMPI1004N – R68M	0.68	100	2.70	32.0	20.0
GSMPI1004N – R88M	0.88	100	2.50	30.0	22.5
GSMPI1004N – 1R0M	1.00	100	3.20	26.0	19.0
GSMPI1004N – 1R5M	1.50	100	4.20	20.0	16.0
GSMPI1004N – 2R2M	2.20	100	7.00	18.0	14.0
GSMPI1004N – 3R3M	3.30	100	13.00	15.0	10.0
GSMPI1004N – 4R7M	4.70	100	15.50	14.0	9.0
GSMPI1004N – 5R6M	5.60	100	22.00	12.0	8.0
GSMPI1004N – 6R8M	6.80	100	26.00	11.0	7.0
GSMPI1004N – 8R2M	8.20	100	27.80	11.0	7.0
GSMPI1004N – 100M	10.00	100	38.00	9.0	6.3

※Test Freq. : 100KHz / 0.25V.

※Operating Temp. :  $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$

※Inductance drop = 20% 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

## GSMPC0402CA

Electrical Characteristics for GSMPC0402CA Series [GSMPC0402CA 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) (TYP) 定格電流	Irms (A) (TYP) 溫昇電流
GSMPC0402CA – R22M	0.22	100	6.60	21.0	9.5
GSMPC0402CA – R33M	0.33	100	11.00	12.0	10.0
GSMPC0402CA – R47M	0.47	100	14.00	11.0	7.5
GSMPC0402CA – R56M	0.56	100	16.00	11.0	7.0
GSMPC0402CA – R68M	0.68	100	18.00	8.6	7.0
GSMPC0402CA – 1R0M	1.00	100	27.00	8.0	6.0
GSMPC0402CA – 1R2M	1.20	100	27.00	7.5	6.0
GSMPC0402CA – 1R5M	1.50	100	46.00	7.0	5.0
GSMPC0402CA – 2R2M	2.20	100	58.00	5.5	4.5
GSMPC0402CA – 3R3M	3.30	100	87.00	4.5	3.3
GSMPC0402CA – 4R7M	4.70	100	105.00	3.0	2.8
GSMPC0402CA – 6R8M	6.80	100	175.00	2.8	2.4
GSMPC0402CA – 100M	10.00	100	282.00	2.2	1.6

## GSMPC0703CA

Electrical Characteristics for GSMPC0703CA Series [GSMPC0703CA 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) (TYP) 定格電流	Irms (A) (TYP) 溫昇電流
GSMPC0703CA – R22M	0.22	100	3.0	42.0	24.0
GSMPC0703CA – R33M	0.33	100	3.5	30.0	21.0
GSMPC0703CA – R47M	0.47	100	4.1	21.0	18.0
GSMPC0703CA – R56M	0.56	100	4.5	19.0	16.5
GSMPC0703CA – R68M	0.68	100	5.3	18.0	16.0
GSMPC0703CA – R82M	0.82	100	6.0	18.0	14.0
GSMPC0703CA – 1R0M	1.00	100	7.4	16.0	12.0
GSMPC0703CA – 1R5M	1.50	100	12.1	14.0	12.0
GSMPC0703CA – 2R2M	2.20	100	15.0	13.0	9.5
GSMPC0703CA – 3R3M	3.30	100	22.0	10.5	8.5
GSMPC0703CA – 4R7M	4.70	100	33.0	6.5	6.0
GSMPC0703CA – 8R2M	8.20	100	60.0	6.0	5.0
GSMPC0703CA – 100M	10.00	100	67.0	5.5	4.5
GSMPC0703CA – 150M	15.00	100	115.0	4.5	3.0
GSMPC0703CA – 220M	22.00	100	200.0	4.0	2.3
GSMPC0703CA – 330M	33.00	100	310.0	3.0	2.0

※Test Freq. : 100KHz / 1.0V.

※Operating Temp. : -55°C ~ +125°C

※Inductance drop = 30% typ. at Isat.

※ $\Delta$  T=40°C rise at Irms.

※Storage Temperature&Humidity :  $\leq$  40°C & 70% RH maximum

# SMT Shielded Power Inductors

## GSMPC1004Z

Electrical Characteristics for GSMPC1004Z Series [GSMPC1004Z 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) (TYP) 定格電流	Irms (A) (TYP) 溫昇電流
GSMPC1004Z – R22M	0.22	100	1.0	60.0	35.0
GSMPC1004Z – R30M	0.30	100	1.1	45.0	35.0
GSMPC1004Z – R36M	0.36	100	1.2	45.0	30.0
GSMPC1004Z – R47M	0.47	100	1.7	40.0	30.0
GSMPC1004Z – R56M	0.56	100	1.8	33.0	25.0
GSMPC1004Z – R68M	0.68	100	2.4	30.0	23.0
GSMPC1004Z – R80M	0.80	100	2.7	29.0	23.0
GSMPC1004Z – 1R0M	1.00	100	3.3	28.0	19.0
GSMPC1004Z – 1R5M	1.50	100	4.2	24.0	16.0
GSMPC1004Z – 2R2M	2.20	100	7.0	16.5	12.0
GSMPC1004Z – 3R3M	3.30	100	11.8	16.0	11.0
GSMPC1004Z – 4R7M	4.70	100	20.0	13.0	9.0
GSMPC1004Z – 6R8M	6.80	100	25.0	12.0	8.5
GSMPC1004Z – 8R2M	8.20	100	27.0	9.0	8.0
GSMPC1004Z – 100M	10.00	100	30.0	8.5	7.8
GSMPC1004Z – 150M	15.00	100	45.0	7.0	6.5
GSMPC1004Z – 220M	22.00	100	66.0	5.5	5.0
GSMPC1004Z – 330M	33.00	100	92.0	4.8	4.4
GSMPC1004Z – 470M	47.00	100	145.0	3.5	3.3
GSMPC1004Z – 680M	68.00	100	195.0	3.0	2.5

※Test Freq. : 100KHz / 1.0V.

※Operating Temp. :  $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$

※Inductance drop = 30% typ. at Isat.

※ $\Delta T=40^{\circ}\text{C}$  rise at I<sub>rms</sub>.

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