

# SMD Wirewound Chip Open-Type Inductors

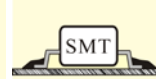
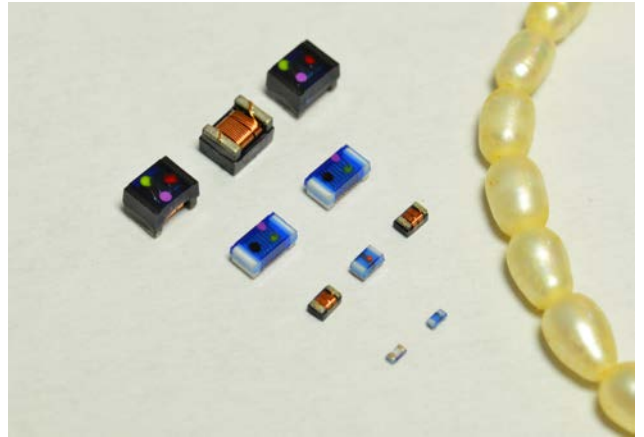
## GS0402CS(1005) / GS0603CS(1608)

### Features (特長)

- High frequency (高頻)
- Highest possible SRFs as well as excellent Q values (高共振頻率及高品質因素)
- The wire is wound directly on the ceramic core at a precision pitch (高精度繞線製品)

### Applications (用途)

- Pager, Cordless phone & High Freq. Communication Products (呼叫器、行動電話及高頻通訊類產品)
- GPS (衛星導航系統)



### Product Identification (產品識別)

GS0402 \_\_\_\_\_ - \_\_\_\_\_ (Ex. GS0402CS-2N0S)

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1. SMD Wirewound Chip Open-Type Inductors (小型繞線開放式晶片電感) (GS0402CS, GS0603CS)

2. Material (材質)

C → Ceramic (陶瓷)

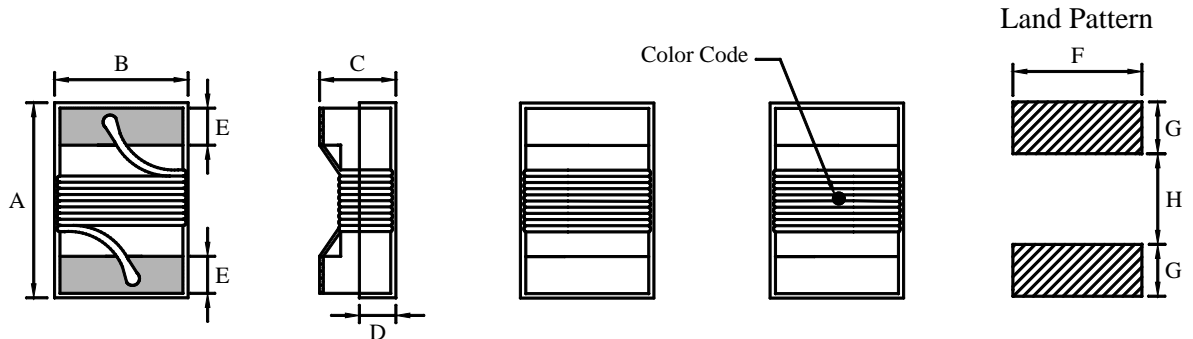
3. Terminal (端子)

S → Pd/Pt/Ag with wraparound metallizing (銀)

4. Inductance (電感值)

5. Tolerance (誤差值) (參照表 G 2%, J 5%, K 10%)

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



Unit In mm

Type (型式)	A (max)	B (max)	C (max)	D (Ref.)	E	F	G	H
GS0402CS(1005)	1.19	0.70	0.66	0.25	0.23±0.1	0.66	0.36	0.46
GS0603CS(1608)	1.80	1.20	1.02	0.45	0.33(Ref.)	1.02	0.64	0.64

# SMD Wirewound Chip Open-type Inductors

## GS0402CS(1005)

Electrical Characteristics for GS0402CS(1005) Series [GS0402CS(1005)系列電子特性規格]

Part Number 產品料號	Inductance (nH) 電感值	Tolerance 誤差值	Q(min) 品質 因數	Freq.(MHz) L Q 測試頻率		SRF(MHz) (min) 共振頻率	DCR (mΩ) (max) 直流阻抗	Rated Current (mA)max 定格電流
GS0402CS – 1N0□	1.00	J, K	16	250	250	12700	45	1360
GS0402CS – 1N2□	1.20	J, K	16	250	250	12900	90	740
GS0402CS – 1N8□	1.80	J, K	16	250	250	12000	70	1040
GS0402CS – 2N0□	2.00	H, J, K	16	250	250	11100	70	1040
GS0402CS – 2N2□	2.20	H, J, K	19	250	250	10800	70	960
GS0402CS – 2N4□	2.40	H, J, K	15	250	250	10500	68	790
GS0402CS – 2N7□	2.70	H, J, K	16	250	250	10400	120	640
GS0402CS – 3N3□	3.30	H, J, K	19	250	250	7000	66	840
GS0402CS – 3N6□	3.60	H, J, K	19	250	250	6800	66	840
GS0402CS – 3N9□	3.90	H, J, K	19	250	250	6000	66	840
GS0402CS – 4N3□	4.30	H, J, K	18	250	250	6000	91	700
GS0402CS – 4N7□	4.70	H, J, K	15	250	250	4770	130	640
GS0402CS – 5N1□	5.10	H, J, K	20	250	250	4800	83	800
GS0402CS – 5N6□	5.60	H, J, K	20	250	250	4800	83	760
GS0402CS – 6N2□	6.20	H, J, K	20	250	250	4800	83	760
GS0402CS – 6N8□	6.80	G, J, K	20	250	250	4800	83	680
GS0402CS – 7N3□	7.30	G, J, K	22	250	250	4800	260	680
GS0402CS – 7N5□	7.50	G, J, K	22	250	250	4800	100	680
GS0402CS – 8N2□	8.20	G, J, K	22	250	250	4400	100	680
GS0402CS – 8N7□	8.70	G, J, K	18	250	250	4100	200	480
GS0402CS – 9N0□	9.00	G, J, K	22	250	250	4160	100	680
GS0402CS – 9N5□	9.50	G, J, K	18	250	250	4000	200	480
GS0402CS – 10N□	10.00	G, J, K	21	250	250	3900	200	480
GS0402CS – 11N□	11.00	G, J, K	24	250	250	3680	120	640
GS0402CS – 12N□	12.00	G, J, K	24	250	250	3600	120	640
GS0402CS – 13N□	13.00	G, J, K	24	250	250	3450	210	440
GS0402CS – 15N□	15.00	G, J, K	24	250	250	3280	170	560
GS0402CS – 16N□	16.00	G, J, K	24	250	250	3100	220	560
GS0402CS – 18N□	18.00	G, J, K	25	250	250	3100	230	420
GS0402CS – 19N□	19.00	G, J, K	24	250	250	3040	200	480
GS0402CS – 20N□	20.00	G, J, K	25	250	250	3000	250	420
GS0402CS – 22N□	22.00	G, J, K	25	250	250	2800	300	400
GS0402CS – 23N□	23.00	G, J, K	22	250	250	2720	300	400
GS0402CS – 24N□	24.00	G, J, K	25	250	250	2700	300	400
GS0402CS – 27N□	27.00	G, J, K	24	250	250	2480	300	400
GS0402CS – 30N□	30.00	G, J, K	25	250	250	2350	300	400
GS0402CS – 33N□	33.00	G, J, K	24	250	250	2350	440	400
GS0402CS – 36N□	36.00	G, J, K	24	250	250	2320	440	320

# SMD Wirewound Chip Open-type Inductors

## GS0402CS(1005)

Electrical Characteristics for GS0402CS(1005) Series [GS0402CS(1005)系列電子特性規格]

Part Number 產品料號	Inductance (nH) 電感值	Tolerance 誤差值	Q(min) 品質 因數	Freq.(MHz) L Q 測試頻率		SRF(MHz) (min) 共振頻率	DCR (mΩ) (max) 直流阻抗	Rated Current (mA)max 定格電流
GS0402CS – 39N□	39.00	G, J, K	25	250	250	2100	550	200
GS0402CS – 40N□	40.00	G, J, K	24	250	250	2240	440	320
GS0402CS – 43N□	43.00	G, J, K	25	250	250	2030	810	100
GS0402CS – 47N□	47.00	G, J, K	20	250	250	2100	830	150
GS0402CS – 51N□	51.00	G, J, K	25	250	250	1750	820	100
GS0402CS – 56N□	56.00	G, J, K	22	250	250	1760	970	100
GS0402CS – 68N□	68.00	G, J, K	22	250	250	1620	1120	100
GS0402CS – 82N□	82.00	G, J, K	20	250	250	1260	1550	50
GS0402CS – R10□	100.00	G, J, K	20	250	250	1160	2000	30
GS0402CS – R12□	120.00	G, J, K	20	250	250	1100	2200	50

※Operating Temp. : -40°C ~ +125°C

※Storage Temperature&Humidity : ≤ 40°C & 70% RH maximum

# SMD Wirewound Chip Open-type Inductors

## GS0603CS(1608)

Electrical Characteristics for GS0603CS(1608) Series [GS0603CS(1608)系列電子特性規格]

Part Number	Inductance (nH)	Tolerance	Q(min) 品質 因數	Freq.(MHz)		SRF(MHz)	DCR( $\Omega$ ) (max)	I <sub>rms</sub> (mA) (max)	Color Code
產品料號	電感值	誤差值		L	Q	(min)	直流阻抗	定格電流	
GS0603CS – 1N6□	1.60	J, K	24	250	250	12500	0.030	700	Red
GS0603CS – 1N8□	1.80	J, K	16	250	250	12500	0.045	700	Black
GS0603CS – 3N3□	3.30	J, K	30	250	250	5900	0.045	700	Blue
GS0603CS – 3N6□	3.60	J, K	22	250	250	5900	0.063	700	Red
GS0603CS – 3N9□	3.90	J, K	22	250	250	6900	0.080	700	Brown
GS0603CS – 4N3□	4.30	J, K	22	250	250	5900	0.063	700	Orange
GS0603CS – 4N7□	4.70	J, K	20	250	250	5800	0.085	700	Violet
GS0603CS – 5N1□	5.10	J, K	20	250	250	5700	0.115	700	Green
GS0603CS – 5N6□	5.60	J, K	18	250	250	5800	0.160	700	Black
GS0603CS – 6N3□	6.30	J, K	26	250	250	5700	0.115	700	White
GS0603CS – 6N8□	6.80	J, K	27	250	250	5800	0.125	700	Red
GS0603CS – 7N5□	7.50	J, K	28	250	250	4800	0.115	700	Brown
GS0603CS – 8N2□	8.20	J, K	30	250	250	4700	0.125	700	Orange
GS0603CS – 8N7□	8.70	J, K	28	250	250	4600	0.109	700	Yellow
GS0603CS – 9N5□	9.50	J, K	28	250	250	5400	0.145	700	Blue
GS0603CS – 10N□	10.00	G, J, K	31	250	250	4800	0.145	700	Orange
GS0603CS – 11N□	11.00	G, J, K	30	250	250	4000	0.145	700	Gray
GS0603CS – 12N□	12.00	G, J, K	35	250	250	4000	0.145	700	Yellow
GS0603CS – 15N□	15.00	G, J, K	35	250	250	4000	0.180	700	Green
GS0603CS – 16N□	16.00	G, J, K	34	250	250	3300	0.170	700	White
GS0603CS – 18N□	18.00	G, J, K	35	250	250	3100	0.180	700	Blue
GS0603CS – 22N□	22.00	G, J, K	38	250	250	3000	0.205	700	Violet
GS0603CS – 23N□	23.00	G, J, K	38	250	250	2850	0.205	700	Orange
GS0603CS – 24N□	24.00	G, J, K	36	250	250	2650	0.205	700	Black
GS0603CS – 27N□	27.00	G, J, K	40	250	250	2800	0.220	600	Gray
GS0603CS – 30N□	30.00	G, J, K	37	250	250	2250	0.220	600	Brown
GS0603CS – 33N□	33.00	G, J, K	40	250	250	2300	0.240	600	White
GS0603CS – 36N□	36.00	G, J, K	37	250	250	2080	0.250	600	Red
GS0603CS – 39N□	39.00	G, J, K	40	250	250	2200	0.260	600	Black
GS0603CS – 43N□	43.00	G, J, K	38	250	250	2000	0.280	600	Orange
GS0603CS – 47N□	47.00	G, J, K	38	200	200	2000	0.280	600	Brown
GS0603CS – 56N□	56.00	G, J, K	38	200	200	1900	0.310	600	Red
GS0603CS – 68N□	68.00	G, J, K	37	200	200	1700	0.340	600	Orange
GS0603CS – 72N□	72.00	G, J, K	34	150	150	1700	0.490	400	Yellow
GS0603CS – 82N□	82.00	G, J, K	34	150	150	1700	0.540	400	Green
GS0603CS – 91N□	91.00	G, J, K	34	150	150	1500	0.560	400	Brown
GS0603CS – R10□	100.00	G, J, K	34	150	150	1400	0.580	400	Blue

# SMD Wirewound Chip Open-type Inductors

## GS0603CS(1608)

Electrical Characteristics for GS0603CS(1608) Series [GS0603CS(1608)系列電子特性規格]

Part Number	Inductance (nH)	Toler- ance	Q(min)	Freq.(MHz)		SRF(MHz)	DCR( $\Omega$ )	I <sub>rms</sub> (mA)	Color Code
產 品 料 號	電感值	誤差值	品質 因數	L	Q	(min)	(max)	(max)	
				測試頻率		共振頻率	直流阻抗	定格電流	
GS0603CS – R11□	110.00	G, J, K	32	150	150	1350	0.610	300	Violet
GS0603CS – R12□	120.00	G, J, K	32	150	150	1300	0.750	300	Gray
GS0603CS – R15□	150.00	G, J, K	28	150	150	990	0.920	280	White
GS0603CS – R18□	180.00	G, J, K	25	100	100	990	1.500	200	Orange
GS0603CS – R20□	200.00	G, J, K	25	100	100	900	1.700	200	Brown
GS0603CS – R22□	220.00	G, J, K	25	100	100	900	1.700	200	Brown
GS0603CS – R27□	270.00	G, J, K	24	100	100	900	2.450	170	Red
GS0603CS – R33□	330.00	G, J, K	25	100	100	900	2.750	100	Blue
GS0603CS – R39□	390.00	G, J, K	25	100	100	900	3.150	100	Yellow
GS0603CS – R47□	470.00	G, J, K	25	100	100	750	4.000	80	Green

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

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

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