

FEATURES 特点

- Ultra-small size exceptional Q and high SFR make these inductors ideal for high frequency applications where size is at a premium
极小的尺寸、高 Q 值、高 SRF 适用于高频电路
- Have excellent DCR and current carrying characteristic
低阻抗大电流



APPLICATIONS 应用

- Cordless phone and high frequency communication products 无线电话和 高频通信产品

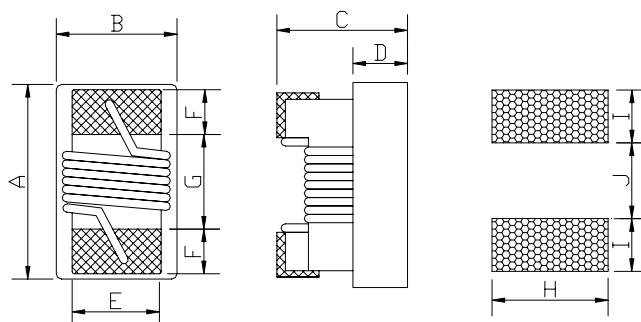
Product Identification 产品标识

MGTC 0603 C W - 100 J S - I

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① MOTTO Series name 系列名称
- ② Dimensions 产品尺寸: [0603inch]
- ③ Base materials 基体材质: [C: Ceramic]
- ④ Structure 产品结构
- ⑤ Inductance 电感量: [1R0=1.0nH; 100=10nH; 101=100nH]
- ⑥ Tolerance of Inductance 电感量公差: [G: ±2% J: ±5% K: ±10%]
- ⑦ Termination materials 电极材质 [G: Gold ; S; Sn]
- ⑧ Packing 包装: (B: Bulk : T: Tape and reel)

Shapes And Dimensions 外形及尺寸示意图



Series	Dimensions(mm) [inch]									
	A(max)	B(max)	C(max)	D	E	F	G	H	I	J
MGTC0402	1.2 [0.047]	0.65 [0.025]	0.66 [0.026]	0.25 [0.010]	0.51 [0.020]	0.23 [0.009]	0.56 [0.022]	0.66 [0.026]	0.36 [0.014]	0.46 [0.018]
MGTC0603	1.8 [0.071]	1.12 [0.044]	1.05 [0.041]	0.38 [0.015]	0.76 [0.030]	0.33 [0.013]	0.86 [0.034]	1.02 [0.040]	0.64 [0.025]	0.64 [0.025]
MGTC0805	2.3 [0.091]	1.75 [0.069]	1.55 [0.061]	0.51 [0.020]	1.27 [0.050]	0.51 [0.020]	1.02 [0.040]	1.78 [0.07]	1.02 [0.040]	0.76 [0.030]



SMD Wire Wound Chip Inductor (MGTC Series) 贴片 (高频) 绕线电感 MGTC 系列

Electrical Characteristics 电气性能

MGTC0402CW Series

MOTTO Part Number	L(nH)	Test Freq. @900MHz		Test Freq. @1.7GHz		SRF min (GHz)	DCR max. (Ohms)	Rated current (mA)
		Ltyp.	Qtyp.	Ltyp.	Qtyp.			
MGTC0402CW-1R0_ST	1.0	1.02	77	1.02	69	12.7	0.045	1360
MGTC0402CW-2R0_ST	2.0	1.93	54	1.93	75	11.1	0.070	1040
MGTC0402CW-2R2_ST	2.2	2.19	59	2.23	100	10.8	0.070	960
MGTC0402CW-3R3_ST	3.3	3.10	65	3.12	87	7.00	0.066	840
MGTC0402CW-3R9_ST	3.9	3.89	50	4.00	75	6.00	0.066	840
MGTC0402CW-4R7_ST	4.7	4.55	48	4.68	68	4.77	0.130	640
MGTC0402CW-5R6_ST	5.6	5.16	54	5.28	81	4.80	0.083	760
MGTC0402CW-6R8_ST	6.8	6.56	63	6.93	78	4.80	0.083	680
MGTC0402CW-8R2_ST	8.2	8.50	57	8.85	84	4.40	0.100	680
MGTC0402CW-100_ST	10	9.80	50	10.10	67	3.90	0.200	480
MGTC0402CW-120_ST	12	11.9	53	12.70	71	3.60	0.120	640
MGTC0402CW-150_ST	15	14.6	55	15.50	77	3.28	0.170	560
MGTC0402CW-180_ST	18	18.3	57	20.28	62	3.10	0.230	420
MGTC0402CW-220_ST	22	23.2	53	26.75	53	2.80	0.300	400
MGTC0402CW-330_ST	33	34.9	31	41.74	32	2.35	0.300	400
MGTC0402CW-390_ST	39	41.7	47	50.23	45	2.10	0.550	200
MGTC0402CW-470_ST	47	50.0	38	-	-	2.10	0.830	150
MGTC0402CW-560_ST	56	62.8	42	-	-	1.76	0.970	100
MGTC0402CW-680_ST	68	78.2	36	-	-	1.62	1.12	100
MGTC0402CW-820_ST	82	-	-	-	-	1.26	1.55	50
MGTC0402CW-101_ST	100	-	-	-	-	1.16	2.00	30



SMD Wire Wound Chip Inductor (MGTC Series) 贴片 (高频) 绕线电感 MGTC 系列

MGTC0603CW Series

MOTTO Part Number	L (nH)	L Test Freq. (MHz)	Q (min.)	Q Test Freq. (MHz)	SRF min (GHz)	DCR max. (Ohms)	Rated current (mA)
MGTC0603CW-1R8_ST	1.8	250	16	250	12.5	0.045	1360
MGTC0603CW-2R2_ST	2.2	250	13	250	12.5	0.250	100
MGTC0603CW-3R3_ST	3.3	250	35	250	5.9	0.045	700
MGTC0603CW-3R9_ST	3.9	250	22	250	6.9	0.080	700
MGTC0603CW-4R7_ST	4.7	250	20	250	5.8	0.116	700
MGTC0603CW-5R6_ST	5.6	250	26	250	4.8	0.075	700
MGTC0603CW-6R8_ST	6.8	250	27	250	5.8	0.110	700
MGTC0603CW-8R2_ST	8.2	250	30	250	4.2	0.115	700
MGTC0603CW-100_ST	10	250	31	250	4.8	0.130	700
MGTC0603CW-120_ST	12	250	35	250	4.0	0.130	700
MGTC0603CW-150_ST	15	250	35	250	4.0	0.170	700
MGTC0603CW-180_ST	18	250	35	250	3.1	0.170	700
MGTC0603CW-220_ST	22	250	38	250	3.0	0.190	700
MGTC0603CW-270_ST	27	250	40	250	2.8	0.220	600
MGTC0603CW-330_ST	33	250	40	250	2.3	0.220	600
MGTC0603CW-390_ST	39	250	40	250	2.2	0.250	600
MGTC0603CW-470_ST	47	200	38	200	2.0	0.280	600
MGTC0603CW-560_ST	56	200	38	200	1.9	0.310	600
MGTC0603CW-680_ST	68	200	37	200	1.7	0.340	600
MGTC0603CW-820_ST	82	150	34	150	1.7	0.540	400
MGTC0603CW-101_ST	100	150	34	150	1.4	0.580	400
MGTC0603CW-121_ST	120	150	32	150	1.3	0.650	300
MGTC0603CW-151_ST	150	150	28	150	0.99	0.920	280
MGTC0603CW-181_ST	180	100	25	100	0.99	1.25	240
MGTC0603CW-221_ST	220	100	25	100	0.90	2.10	200
MGTC0603CW-271_ST	270	100	24	100	0.90	2.30	170
MGTC0603CW-331_ST	330	100	25	100	0.90	3.89	100
MGTC0603CW-391_ST	390	100	25	100	0.90	4.35	100
MGTC0603CW-471_ST	470	100	25	100	0.60	3.60	80



SMD Wire Wound Chip Inductor (MGTC Series) 贴片 (高频) 绕线电感 MGTC 系列

MGTC0805CW Series

MOTTO Part Number	L (nH)	L Test Freq. (MHz)	Q (min.)	Q Test Freq. (MHz)	SRF min (GHz)	DCR max. (Ohms)	Rated current (mA)
MGTC0805CW-3R3_ST	3.3	250	50	1500	7.90	0.08	600
MGTC0805CW-5R6_ST	5.6	250	65	1000	5.50	0.08	600
MGTC0805CW-6R8_ST	6.8	250	50	1000	5.50	0.11	600
MGTC0805CW-8R2_ST	8.2	250	50	1000	4.70	0.12	600
MGTC0805CW-100_ST	10	250	60	500	4.20	0.10	600
MGTC0805CW-120_ST	12	250	50	500	4.00	0.15	600
MGTC0805CW-150_ST	15	250	50	500	3.40	0.17	600
MGTC0805CW-180_ST	18	250	50	500	3.30	0.20	600
MGTC0805CW-220_ST	22	250	55	500	2.60	0.22	500
MGTC0805CW-270_ST	27	250	55	500	2.50	0.25	500
MGTC0805CW-330_ST	33	250	60	500	2.05	0.27	500
MGTC0805CW-390_ST	39	250	60	500	2.00	0.29	500
MGTC0805CW-470_ST	47	200	60	500	1.65	0.31	500
MGTC0805CW-560_ST	56	200	60	500	1.55	0.34	500
MGTC0805CW-680_ST	68	200	60	500	1.45	0.38	500
MGTC0805CW-820_ST	82	150	65	500	1.30	0.42	400
MGTC0805CW-101_ST	100	150	65	500	1.20	0.46	400
MGTC0805CW-121_ST	120	150	50	250	1.10	0.51	400
MGTC0805CW-151_ST	150	100	50	250	0.92	0.56	400
MGTC0805CW-181_ST	180	100	50	250	0.87	0.64	400
MGTC0805CW-221_ST	220	100	50	250	0.85	0.70	400
MGTC0805CW-271_ST	270	100	48	250	0.65	1.00	350
MGTC0805CW-331_ST	330	100	48	250	0.60	1.40	310
MGTC0805CW-391_ST	390	100	48	250	0.56	1.50	290
MGTC0805CW-471_ST	470	50	33	100	0.38	1.76	250
MGTC0805CW-561_ST	560	25	23	50	0.34	1.90	230
MGTC0805CW-681_ST	680	25	23	50	0.188	2.20	190
MGTC0805CW-821_ST	820	25	23	50	0.215	2.35	180

1. Please specify the inductance tolerance: G=±2% J=±5% K=±10%
2. Rated current: Average current for a 15°C rise above 25°C ambient.