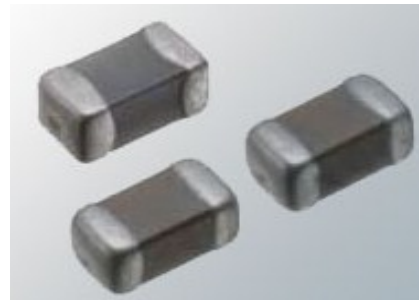


FEATURES 特点

- Compact size and light weight 尺寸小, 重量轻
- Excellent solderability and heat resistance for either flow or reflow soldering 良好的可焊性和耐焊性
- No cross coupling between inductors due to magnetic shield 良好的磁屏蔽抗干扰性
- Low RDC and High IDC 低直流电阻和高 IDC 特点



APPLICATIONS 应用

- Cellular platform DC-DC converter circuit(移动设备用 DC-DC 转换器电路)
- Portable AV equipment (digital camera, DVD Type) 便携式 AV 设备 (数码照相机, DVD 等)
- Cellular platform(handset Type) 移动通讯设备 (手机等)
- Memex(computer Type) 信息机器 (电脑等)

Product Identification 产品标识

MGFL 2012 E 2R2 M I - LF
① ② ③ ④ ⑤ ⑥ ⑦

① MOTTO Series name 系列名称

② Dimension 产品尺寸 L×W: 【2012: 2.0mm×1.2mm】

③ Material code 材料代码

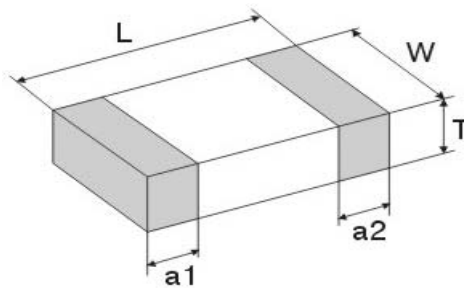
④ Inductance 电感量: 【R47=0.47 uH 2R2=2.2uH 100=10 uH】

⑤ Tolerance of Inductance 电感量公差: 【 M: ±20%】

⑥ Packing Style: 【 T: Taping 编带盘装 B: Bulk 散装】

⑦ Lead free products 无铅产品

Shapes And Dimensions 外形及尺寸示意图



Type 型号	Dimensions (mm) [inch]			
	L长	W宽	T高	a1, a2
1608 [0603]	1.60±0.15 [0.063±0.006]	0.80±0.15 [0.031±0.006]	0.80±0.15 [0.031±0.006]	0.30±0.20 [0.012±0.008]
2012 [0805]	2.00±0.20 [0.079±0.008]	1.25±0.20 [0.049±0.008]	0.80±0.20 [0.031±0.008]	0.50±0.30 [0.02±0.012]
2016[0806]	2.00±0.20 [0.079±0.008]	1.25±0.20 [0.049±0.008]	0.80±0.20[0.031±0.008]	0.50±0.30 [0.02±0.012]
2520[1008]	2.50±0.20[0.098±0.008]	2.00±0.20[0.079±0.008]	1.10±0.10[0.043±0.004]	0.50±0.30[0.02±0.012]
3216 [1206]	3.20±0.20 [0.126±0.008]	1.60±0.20 [0.063±0.008]	1.10±0.30 [0.043±0.012]	0.50±0.30 [0.02±0.012]
3225[1210]	3.20±0.20[0.126±0.008]	2.50±0.20[0.098±0.008]	1.25±0.20[0.049±0.008]	0.70±0.30[0.028±0.012]

Electrical Characteristics 电气性能

MGFL 1608 (0603) Series

MOTTO Part No.	L (uH)	LTest Freq. (MHz)	SRF(MHz) /min	RDC(Ω) ±30%	I _r (mA)*1 /max	I _r (mA)*2 /max
MGFL1608F1R0□	1.0	1	125	0.15	360	900
MGFL1608F1R5□	1.5	1	109	0.18	260	625
MGFL1608F2R2□	2.2	1	90	0.25	240	600
MGFL1608F3R3□	3.3	1	70	0.30	190	525
MGFL1608F4R7□	4.7	1	50	0.38	170	500
MGFL1608F6R8□	6.8	1	40	0.41	135	400
MGFL1608F100□	10.0	1	33	0.55	120	400
MGFL1608F150□	15.0	1	20	0.9	75	220
MGFL1608F220□	22.0	1	15	1.0	70	200



Multilayer Chip Ferrite Large Current Inductor 叠层片式铁氧体大电流电感

MGFL 2012 (0805) Series

MOTTO Part No.	L (uH)	LTest Freq. (MHz)	SRF(MHz) /min	RDC(Ω) $\pm 30\%$	Ir(mA)*1 /max	Ir(mA)*2 /max
MGFL2012F1R0□	1.0	1	75	0.15	550	1400
MGFL2012F1R5□	1.5	1	60	0.16	450	1300
MGFL2012F2R2□	2.2	1	50	0.2	400	1200
MGFL2012F3R3□	3.3	1	41	0.22	300	1100
MGFL2012F4R7□	4.7	1	35	0.25	280	1000
MGFL2012F6R8□	6.8	1	29	0.27	200	550
MGFL2012F100□	10.0	1	24	0.32	180	500
MGFL2012F150□	15.0	1	19	0.5	140	400
MGFL2012F220□	22.0	1	18	0.7	110	300

MGFL 2016 (0806) Series

MOTTO Part No.	L (uH)	LTest Freq. (MHz)	SRF(MHz) /min	RDC(Ω) $\pm 30\%$	Ir(mA)*1 /max	Ir(mA)*2 /max
MGFL2016F1R0□	1.0	1	60	0.085	600	1400
MGFL2016F1R5□	1.5	1	50	0.11	500	1200
MGFL2016F2R2□	2.2	1	40	0.11	450	1200
MGFL2016F3R3□	3.3	1	30	0.12	400	1200
MGFL2016F4R7□	4.7	1	20	0.14	300	1100

MGFL 2520 (1008) Series

MOTTO Part No.	L (uH)	LTest Freq. (MHz)	SRF(MHz) /min	RDC(Ω) $\pm 30\%$	Ir(mA)*1 /max	Ir(mA)*2 /max
MGFL2520F1R0□	1.0	1	60	0.1	800	1200
MGFL2520F1R5□	1.5	1	50	0.11	700	1100
MGFL2520F2R2□	2.2	1	40	0.12	600	1100
MGFL2520F3R3□	3.3	1	30	0.12	600	1100
MGFL2520F4R7□	4.7	1	20	0.14	500	1100



Multilayer Chip Ferrite Large Current Inductor 叠层片式铁氧体大电流电感

MGFL 3216 (1206) Series

MOTTO Part No.	L (uH)	LTest Freq. (MHz)	SRF(MHz) /min	RDC(Ω) $\pm 30\%$	Ir(mA)*1 /max	Ir(mA)*2 /max
MGFL3216F1R0□	1.0	1	90	0.10	1200	1600
MGFL3216F1R5□	1.5	1	75	0.12	1100	1500
MGFL3216F2R2□	2.2	1	58	0.15	1000	1300
MGFL3216F3R3□	3.3	1	49	0.20	870	1200
MGFL3216F4R7□	4.7	1	41	0.32	740	980
MGFL3216F6R8□	6.8	1	34	0.41	590	830
MGFL3216F100□	10.0	1	28	0.50	490	670

MGFL 3225 (1210) Series

MOTTO Part No.	L (uH)	LTest Freq. (MHz)	SRF(MHz) /min	RDC(Ω) $\pm 30\%$	Ir(mA)*1 /max	Ir(mA)*2 /max
MGFL3225F1R0□	1.0	1	90	0.08	1500	1800
MGFL3225F1R5□	1.5	1	80	0.10	1300	1600
MGFL3225F2R2□	2.2	1	58	0.15	1100	1400
MGFL3225F3R3□	3.3	1	49	0.18	900	1300
MGFL3225F4R7□	4.7	1	41	0.22	800	1000
MGFL3225F6R8□	6.8	1	34	0.30	600	850
MGFL3225F100□	10.0	1	28	0.42	500	700

备注：额定电流 Rated Current

1.基于电感变化的标准值：因直流重叠的特性而使电感值比初始值下降 30%的电流值；Rated current based on inductance variation: Current when inductance decreases by 30% of the initial value due to direct current superimposed characteristics.

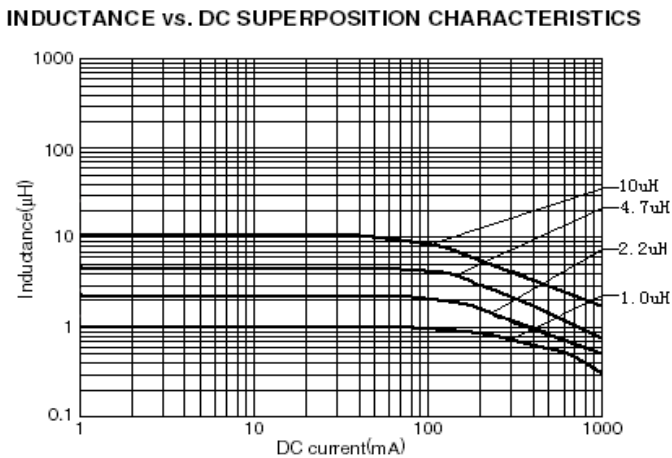
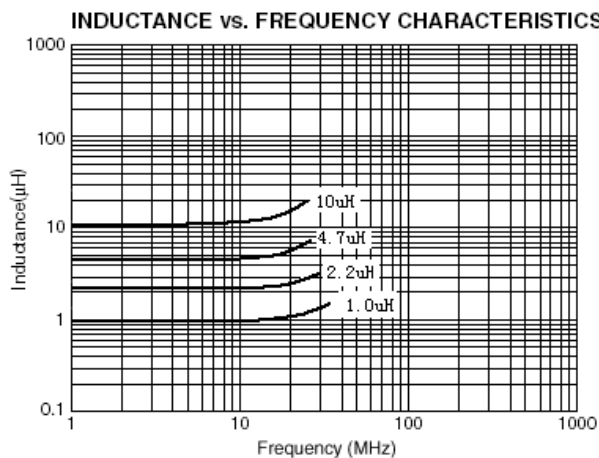
2.基于产品表面温度上升的标准值：产品表面温度达到+40℃时的电流值；Rated current based on increasing product temperature: Current when temperature of the product reaches +40℃



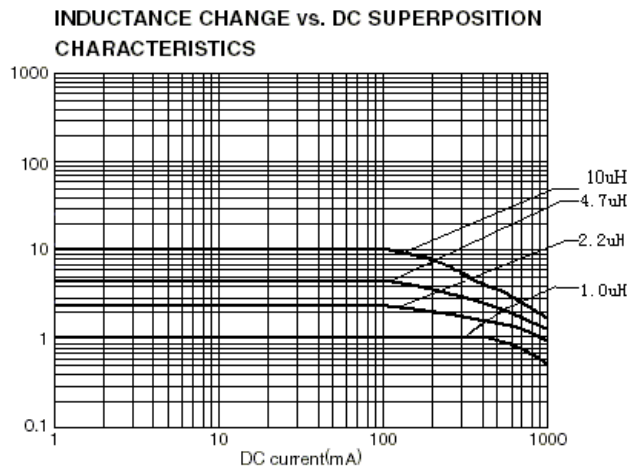
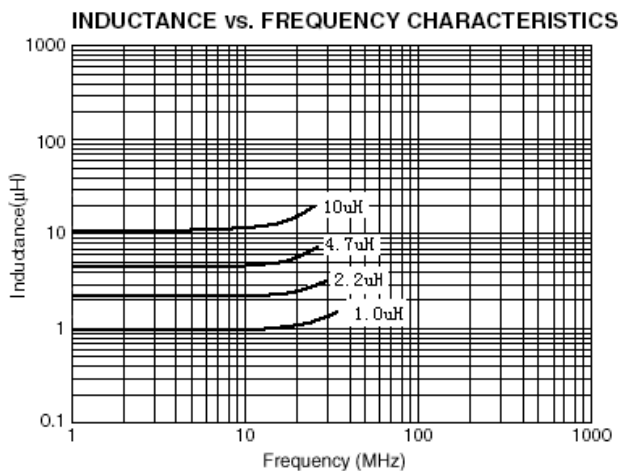
Multilayer Chip Ferrite Large Current Inductor 叠层片式铁氧体大电流电感

Characteristic curve 特性曲线

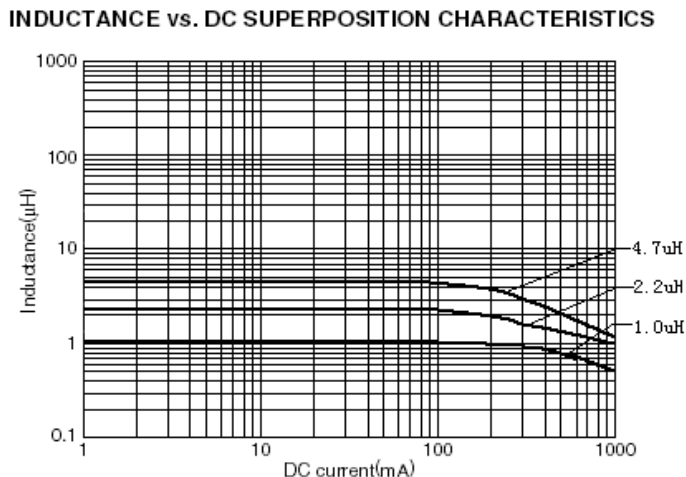
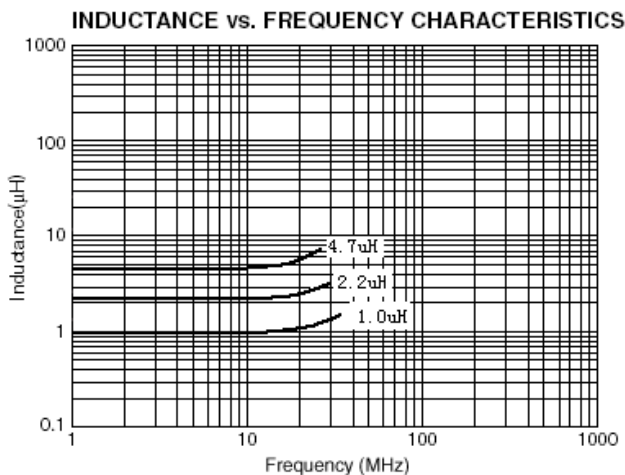
MGFL 1608(0603) Series



MGFL 2012(0805) Series



MGFL 2016(0806) Series

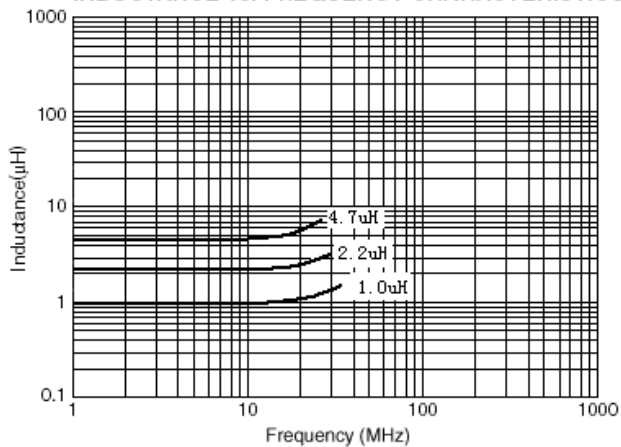




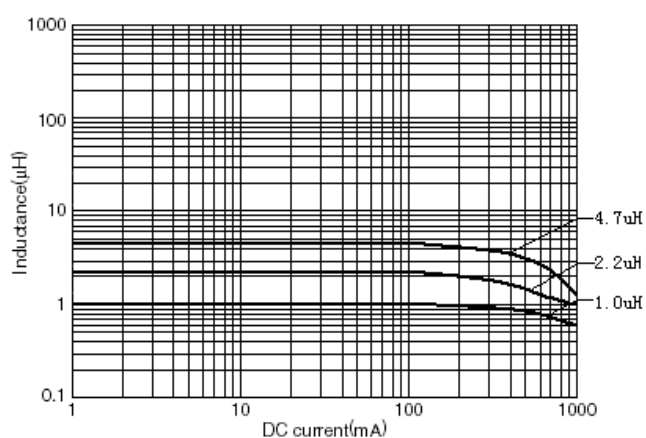
Multilayer Chip Ferrite Large Current Inductor 叠层片式铁氧体大电流电感

MGFL 2520(1008) Series

INDUCTANCE vs. FREQUENCY CHARACTERISTICS

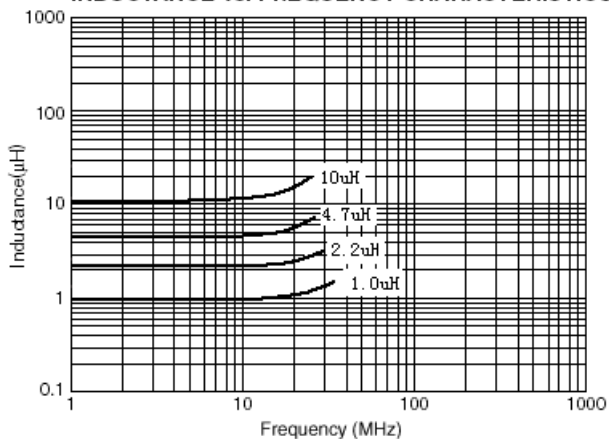


INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

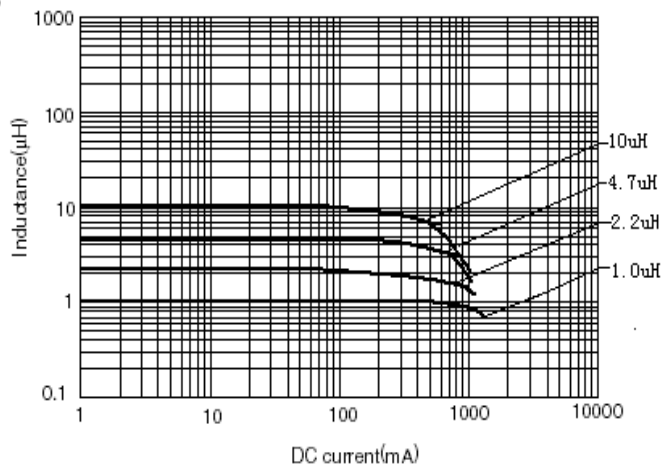


MGFL 3216(1206) Series

INDUCTANCE vs. FREQUENCY CHARACTERISTICS

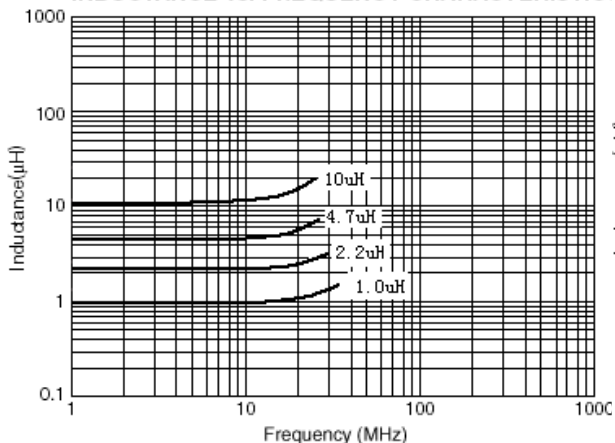


INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



MGFL 3225(1210) Series

INDUCTANCE vs. FREQUENCY CHARACTERISTICS



INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS

