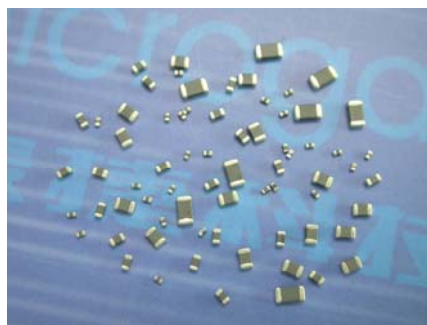


Multilayer Chip Varistor 叠层片式压敏电阻

FEATURES 特点

- Multilayer monolithic construction yields high reliability
独石结构生产，高可靠性
- Excellent solderability and heat resistance for either flow or reflow soldering 良好的可焊性和耐焊性
- Low Leakage current 低的漏电流值
- Low inductance and fast response
低的漏电感和极短的响应时间



APPLICATIONS 应用

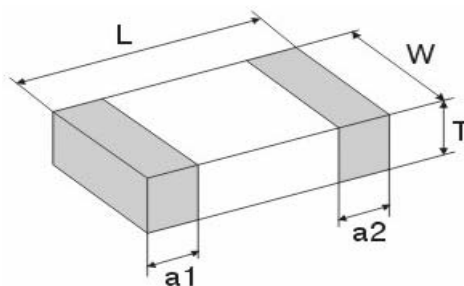
- ESD protection 防静电保护
- ECU protection 电子控制单元保护
- I/O protection 输入/输出保护
- LCD displace 液晶显示技术

Product Identification 产品标识

MGZR 1005 G 180 C151 M I - LF
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Series name 系列名称
- ② Dimension 产品尺寸 L×W: 【1005= 1.0mm×0.5mm ; 1608=1.6mm×0.8mm ; 2012=2.0mm×1.25mm】
- ③ Feature code 特征代号
- ④ Working Voltage 工作电压: 【180=18V】
- ⑤ Capacitance 电容值: 【C151=150pf】
- ⑥ Tolerance of Capacitance 电容公差: 【K: ±10% M: ±20% N: ±30%】
- ⑦ Packing Style 包装方式: 【T: Taping 编带盘装 B: Bulk 散装】
- ⑧ 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	e1
1005[0402]	1.00±0.15 [0.04±0.006]	0.50±0.15 [0.02±0.006]	0.50±0.15 [0.02±0.006]	0.25±0.10 [0.01±0.004]
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]	0.85±0.20 [0.033±0.008]	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]

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Electrical Characteristics 电气性能

MGZR 1005 (0402) Series

Part No.	Max Working Voltage <50uA	Varistor voltage@1mA DC	Max Clamping Voltage 8/20 us	Rated Single Pulse Transient		Typical Capacitance @0.5Vrms 1MHz
				Energy 10/1000 us	Peak Current 8/20us	
Symbol	V _{WM} (V)	V _S (V)	V _C (V)	E _T (J)	I _P (A)	C (PF)
MGZR1005G5R0C330	5.0	9.0~13.0	18	0.05	20	33
MGZR1005G5R0C101	5.0	9.0~13.0	18	0.05	20	100
MGZR1005G5R0C221	5.0	9.0~13.0	18	0.05	20	210
MGZR1005G9R0C500	9.0	13.0~16.0	20	0.05	20	50
MGZR1005G9R0C101	9.0	13.0~16.0	20	0.05	20	100
MGZR1005G140C101	14.0	16.0~20.3	30	0.05	20	100
MGZR1005G140C161	14.0	16.0~20.3	30	0.05	20	160
MGZR1005G180C400	18.0	22.0~28.0	40	0.05	20	40
MGZR1005G180C900	18.0	22.0~28.0	40	0.05	20	90

MGZR 1608 (0603) Series

Part No.	Max Working Voltage <50uA	Varistor voltage@1mA DC	Max Clamping Voltage 8/20 us	Rated Single Pulse Transient		Typical Capacitance @0.5Vrms 1MHz
				Energy 10/1000 us	Peak Current 8/20us	
Symbol	V _{WM} (V)	V _S (V)	V _C (V)	E _T (J)	I _P (A)	C (PF)
MGZR1608G5R0C330	5.0	9.0~13.0	18	0.05	20	33
MGZR1608G5R0C251	5.0	9.0~13.0	18	0.05	20	250
MGZR1608G9R0C700	9.0	13.0~16.0	20	0.05	20	70
MGZR1608G9R0C211	9.0	13.0~16.0	20	0.05	20	210
MGZR1608G140C600	14.0	16.0~20.3	30	0.05	20	60
MGZR1608G140C181	14.0	16.0~20.3	30	0.05	20	180
MGZR1608G180C151	18.0	22.0~28.0	40	0.05	20	150
MGZR1608G180C231	18.0	22.0~28.0	40	0.10	30	230
MGZR1608G260C700	26.0	31.0~38.0	58	0.05	20	70
MGZR1608G260C161	26.0	31.0~38.0	58	0.10	30	160
MGZR1608G300C600	30.0	37.0~46.0	65	0.05	20	60
MGZR1608G300C151	30.0	37.0~46.0	65	0.10	30	150

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MGZR 2012 (0805) Series

Part No.	Max Working Voltage <50uA	Varistor voltage@1mA DC	Max Clamping Voltage 8/20 us	Rated Single Pulse Transient		Typical Capacitance @0.5Vrms 1MHz
				Energy 10/1000 us	Peak Current 8/20us	
Symbol	V _{WM} (V)	V _S (V)	V _C (V)	E _T (J)	I _P (A)	C (PF)
MGZR2012G5R0C330	5.0	9.0~13.0	18	0.05	20	33
MGZR2012G5R0C251	5.0	9.0~13.0	18	0.05	20	250
MGZR2012G9R0C211	9.0	13.0~16.0	20	0.05	20	210
MGZR2012G140C181	14.0	16.0~20.3	30	0.05	20	180
MGZR2012G180C151	18.0	22.0~28.0	40	0.05	20	150
MGZR2012G260C700	26.0	29.5~38.5	58	0.05	20	70
MGZR2012G300C600	30.0	27.0~46.0	65	0.05	20	60

MGZR 3216 (1206) Series

Part No.	Max Working Voltage <50uA	Varistor voltage@1mA DC	Max Clamping Voltage 8/20 us	Rated Single Pulse Transient		Typical Capacitance @0.5Vrms 1MHz
				Energy 10/1000 us	Peak Current 8/20us	
Symbol	V _{WM} (V)	V _S (V)	V _C (V)	E _T (J)	I _P (A)	C (PF)
MGZR3216G5R0C251	5.0	9.0~13.0	18	0.05	20	250
MGZR3216G9R0C211	9.0	13.0~16.0	20	0.05	20	210
MGZR3216G140C181	14.0	16.0~20.3	30	0.05	20	180
MGZR3216G180C700	18.0	22.0~28.0	40	0.05	20	70
MGZR3216G260C600	26.0	29.5~38.5	58	0.05	20	60

Characteristic curve 特性曲线

