产品图示 Product illustration


环境数据	Environmental Data
■ 存储温度范围：5°C~35°C	■ Storage temperature range: 5°C ~35°C
■ 产品需存放在干净干燥 、无有害气体的环境下	■ The product should be stored in a clean and dry environment, away from corrosive or harmful gases
■ 产品未使用前 ，需避免将产品从包装中取出	■ Do not remove the product from its packaging prior to use
■ 在上述储存条件下 ，产品可保持 1 年	■ Shelf Life: 1 year under the specified storage conditions
■ 1 年以上产品 ，检查表面有无氧化 ，需进行焊接测试	■ Over 1 Year: Inspect surface for oxidation and conduct solderability testing before use

描述	Description
■ 满足绝缘耐压	■ Meets insulation withstand voltage requirements
■ 兼容自动化焊接	■ Compatible with automated welding
■ 符合 RoHS 要求和无卤要求	■ Compliant with RoHS standards
■ 紫铜镀锡，塑封工艺中间绝缘处理	■ Purple copper tin-plated, intermediate insulation treatment via plastic encapsulation process
■ 宽温度使用范围：-55~170°C，无感型设计	■ Wide operating temperature range -55~170°C, non-inductive design

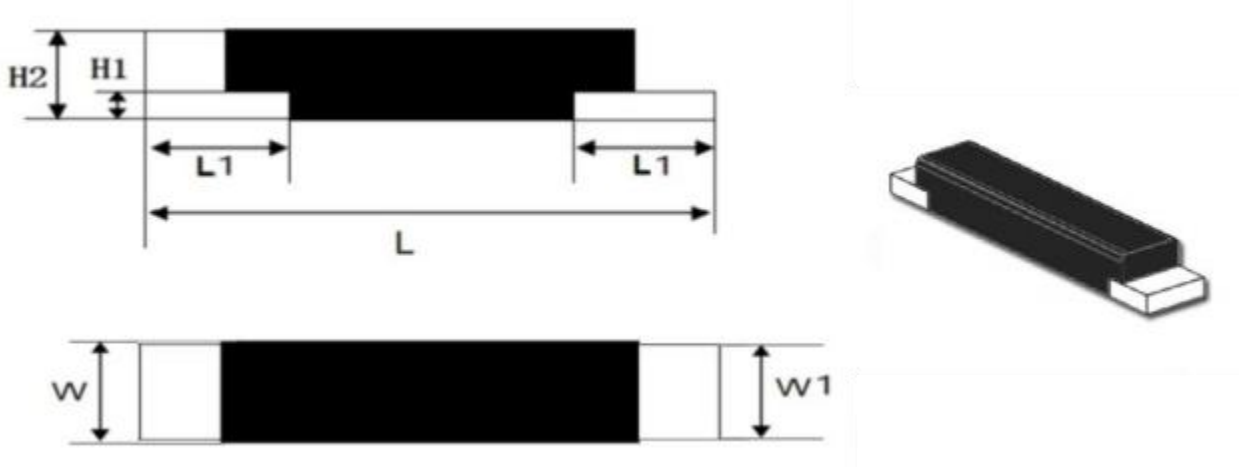
应用领域	Applications
■ 驱动技术、功率电子	■ Driver Technology, Power Electronics
■ 低电感电路	■ Low Inductance Circuits
■ 大电流脉冲电路	■ High Current Pulse Circuits
■ 电流采样、反馈电路	■ Current Sampling, Feedback Circuits
■ 家电控制、汽车电子、通信电源	■ Home Appliance Control, Automotive Electronics, Telecom Power Supplies

■ 产品命名规则(Product Naming Rules)

系列名称 Series	材质 Material	尺寸 Dimensions	产品类型 Product type	阻值 Resistance
MJR	Cu	3.2	E	R000

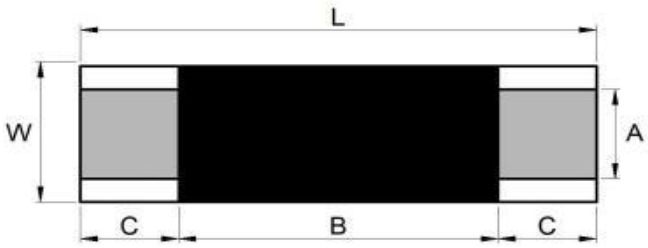
■　产品规格 Product Specifications(Unit:mm)

图示 Graphic：



型号 Part Number	L±0.2	W±0.15	W1±0.15	H1±0.15	H2±0.15	L1±0.15
MJRCu-3.2ER000	3.2	1.3	1.0	0.2	0.6	0.7
MJRCu-5.2ER000	5.2	1.5	1.2	0.2	0.6	1.0
MJRCu-8.2ER000	8.2	1.5	1.2	0.3	0.7	1.0
MJRCu-10.2ER000	10.2	1.5	1.2	0.3	0.7	1.0
MJRCu-13.2ER000	13.2	1.5	1.2	0.3	0.7	1.0

建议焊盘尺寸 Recommended Land Pattern：

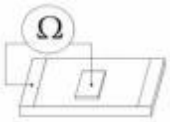


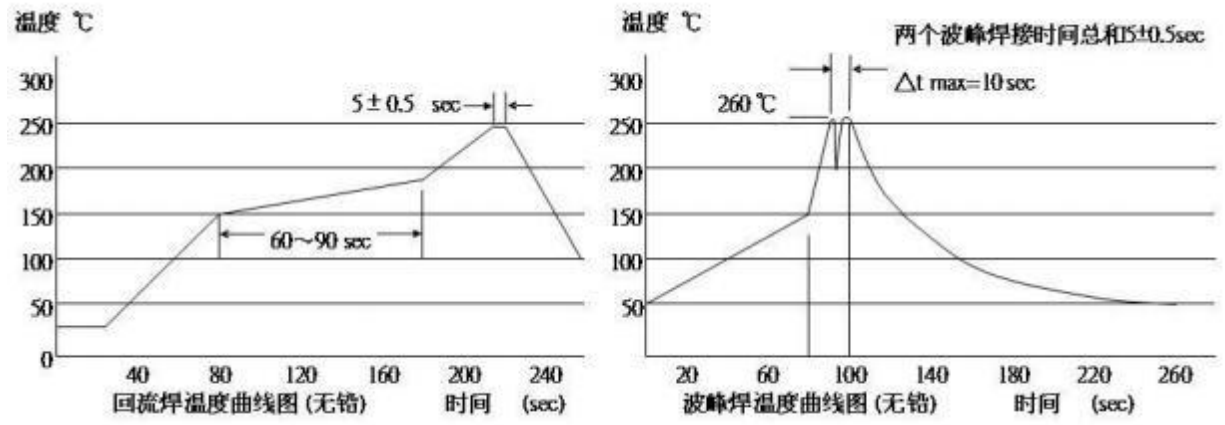
注明：阴影“黑色”部分是塑胶绝缘油层位置；阴影“灰色”部分是电路板焊盘位置

Note: The shaded 'black' area is the plastic insulated oil layer position; the shaded 'gray' area is the circuit board pad position.

型号 Part Number	L	W	A	B	C
MJRCu-3.2ER000	4.8	2.3	1.5	2.0	1.4
MJRCu-5.2ER000	6.8	2.5	1.5	3.4	1.7
MJRCu-8.2ER000	9.8	2.5	1.5	6.4	1.7
MJRCu-10.2ER000	11.8	2.5	1.5	8.4	1.7
MJRCu-13.2ER000	14.8	2.5	1.5	11.4	1.7

电气性能试验 Electrical Performance Test

项目 Item	测试条件 Test condition	标准 Standard
内阻 Internal Resistance	测试元件两端阻值 Measure resistance across both terminals of component.	在规定值内 Within specified
工作电流 Operating Current	元件可承受工作电流不小于 10A The sustainable operating current of component shall be no less than 10A.	额定：20A Rated：20A
绝缘阻值 Insulation Resistance	参考右图，使用平面导电体（建议 1mm*1mm），用<1kg 力压在绝缘层上，测试这导电体与元件两端的绝缘值。 Refer to the figure on the right. Apply a flat conductive block (1 mm *1 mm recommended) against the insulation layer with force<1 kg. Measure insulation resistance between this conductive block and both component terminations. 	9VDC ，>20MΩ
绝缘层附着力 Insulation Layer Adhesion	用拇指测试或橡皮代替拇指测试绝缘体（底层和上面），以 3.0+1/-0KGF 的力来回擦拭 10 次不掉漆 Rub the top & bottom insulation layer with thumb (or eraser substitute), reciprocate 10 times under force of 3.0+1/-0kgF.	掉胶面积<10% Peeling area<10%
SMT 回流焊试验（参考下图） SMT Reflow Soldering Test	回流炉温度：180°C~250°C， 回流焊时间：60S Reflow oven temperature:180°C~250°C; reflow duration:60S	上锡良好，绝缘油不甩 Good solderability,no flaking of insulating coating.
电烙铁焊锡试验（参考下图） Soldering-iron Test	烙铁温度：300±10°C， 焊锡时间：3±0.5S Soldering-iron temperature:300±10°C; soldering time:3±0.5S	上锡良好，绝缘油不甩 Good solderability,no flaking of insulating coating.
波峰焊试验 Wave Soldering Test	波峰炉温度：260±5°C， 两个波峰时间：8S~10S Refer to wave-soldering profile for details. Wave temperature:260±5°C; total dual-wave contact time:8S~10S	上锡良好，绝缘油不甩 Good solderability, no flaking of insulating coating.
高温储存 High-Temperature Storage	置于温度 66°C，15%湿度的恒温恒湿柜中放 96 小时后取出静置 60 分钟之后检查 Store in chamber at 66°C, 15%RH for 96 h. Take out and rest for 60 min before inspection.	两镀锡端不氧化，绝缘油层不甩 No oxidation on tinned terminals,no flaking of insulating coating.
低温储存 Low-Temperature Storage	置于温度-20°C，15%湿度的恒温恒湿柜中放 96 小时后取出静置 60 分钟之后检查 Store in chamber at -20°C, 15%RH for 96 h. Take out and rest for 60 min before inspection.	两镀锡端不氧化，绝缘油层不甩 No oxidation on tinned terminals,no flaking of insulating coating.
耐湿储存 Humidity Storage	置于温度 40±2°C，90~95%湿度的恒温恒湿柜中放 96 小时后取出静置 60 分钟之后检查 Store in chamber at 40±2°C, RH 90~95% for 96 h. Take out and rest for 60 min before inspection.	两镀锡端不氧化，绝缘油层不甩 No oxidation on tinned terminals,no flaking of insulating coating.


温度 ℃
300
250
200
150
100
50
0
5±0.5 sec
60~90 sec
40
80
120
160
200
240
回流焊温度曲线图 (无铅)
时间 (sec)
温度 ℃
两个波峰焊接时间总和5±0.5sec
△t max=10 sec
260 ℃
300
250
200
150
100
50
20
60
100
140
180
220
260
波峰焊温度曲线图 (无铅)
时间 (sec)