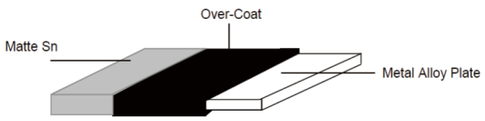
合金低阻贴片电阻(MRMF)Metal Alloy Low–Resistance Resistors

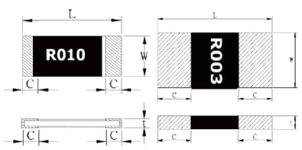
■ Resume 摘要

High power rating up to 6Watts/Low TCR down to ±75PPM/Resistance values from 0.2mΩ to 60mΩ/Customized resistance available.
大功率（6Watts），低温度系数（±75PPM），阻值范围（ 0.2mΩ ~ 60mΩ），可订做阻值

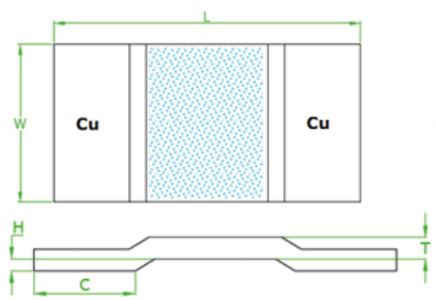
■ Construction 结构图



■ Dimensions 尺寸



Size 规格	L	W	T	C
0805	2.00 ± 0.10	1.25 ± 0.10	0.60 ± 0.20	0.40 ± 0.20
1206	3.20 ± 0.20	1.60 ± 0.20	0.75 ± 0.20 (R=1mΩ)	1.10 ± 0.30 (R=1mΩ)
			0.60 ± 0.20 (2mΩ ≤R≤30mΩ	0.50 ± 0.30 (2mΩ ≤R≤30mΩ)
2010	5.00 ± 0.20	2.50 ± 0.20	0.60 ± 0.20	0.60 ± 0.30
2512	6.40 ± 0.20	3.20 ± 0.20	0.60 ± 0.20	2.0 ± 0.20(R < 3mΩ)
				0.9 ± 0.2(R ≥ 3mΩ)
*2512	6.40 ± 0.20	3.20 ± 0.20	0.70 ± 0.20	2.0 ± 0.20(R ≤ 4mΩ)
				0.9 ± 0.2(R > 4mΩ)



Size规格	L	W	H	C	T
3920	10.0 ± 0.30	5.20 ± 0.30	0.50 ± 0.10	2.20 ± 0.20	Refer 4.0
5930	15.0 ± 0.20	7.60 ± 0.40	0.50 ± 0.10	4.20 ± 0.30	Refer 4.0

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■ Part Numbering 型号名称

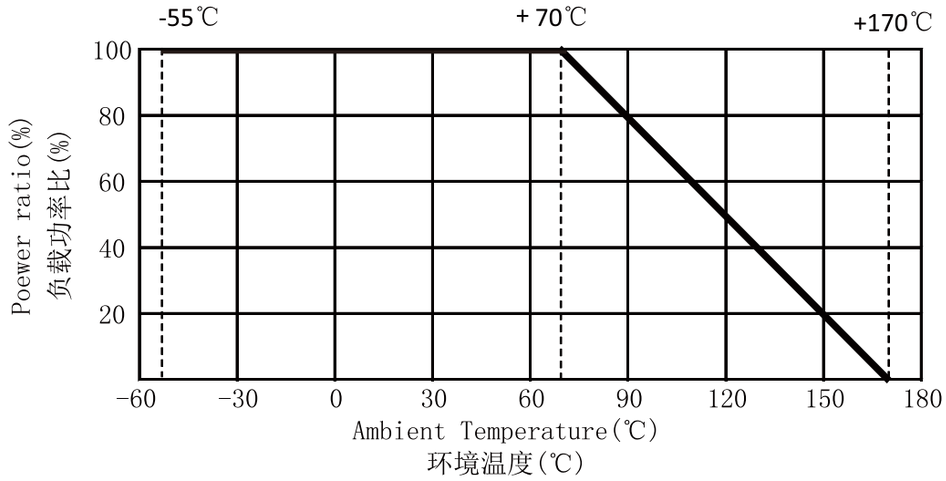
MRMF	6432 (2512)	LR002	F	T	S
Product Type 产品类型	Resistor Size 电阻规格	Resistance 阻值	Resistance Tolerance 阻值公差	Packing Code 包装形式	High Power 升功率
MRMF	2012 (0805) 3216 (1206) 5025 (2010) 6432 (2512) (3920) (5930)	LR001:0.001Ω LR010:0.01Ω LR3M5:0.0035Ω	F=±1% G=±2% J=±5%	T: Taping Reel 卷装 B: Bulk 散装	E:6W Z:5W H:4W R:3W S:2W A:1.5W N:1W Q:3/4W U:1/2W V:1/4W W:1/8W

■ Standard Electrical Specifications 标准规格表

Item 项目 / Type 型号	Power Rating 额定功率	Operating Temp. Range 操作温度范围	Max. Operating Voltage 最大工作电压	Resistance Range 阻值范围 ±1% ±2% ±5%	Insulation Resistance 绝缘阻抗	TCR 温度系数 (PPM/℃)
0805	1/8W 1/4W 1/2W	-55~170℃	√(P*R)	2mΩ≤R≤20mΩ	>100MΩ	±50ppm/℃
	1W			5mΩ		
1206	1/4W 1/2W 1W	-55~170℃	√(P*R)	1mΩ≤R≤30mΩ	>100MΩ	±200ppm/℃ (R=1mΩ) ±100ppm/℃ (2mΩ≤R≤10mΩ) ±75ppm/℃ (R>10mΩ)
2010	1/2W 3/4W 1W 1.5W	-55~170℃	√(P*R)	5mΩ≤R≤30mΩ	>100MΩ	±100ppm/℃ (5mΩ≤R≤10mΩ) ±75ppm/℃ (R>10mΩ)
2512	1W	-55~170℃	√(P*R)	1mΩ≤R≤50mΩ	>100MΩ	±100ppm/℃ (1mΩ≤R≤10mΩ) ±75ppm/℃ (R>10mΩ)
	1.5W			R≤15mΩ		
	2W			R≤10mΩ		
*2512	1W 1.5W 2W 3W	-55~170℃	√(P*R)	1mΩ≤R≤60mΩ	>100MΩ	±75ppm/℃
	1W 2W 3W	-55~170℃	√(P*R)	0.5mΩ≤R≤0.75mΩ	>100MΩ	±75ppm/℃
3920	4W 5W	-55~170℃	√(P*R)	0.3mΩ≤R≤3mΩ	>100MΩ	±50ppm/℃
5930	5W 6W	-55~170℃	√(P*R)	0.2mΩ≤R≤3mΩ	>100MΩ	±50ppm/℃

*:Ultra High Power 超大功率

■ Derating Curve 功率衰减曲线图



■ Environmental Characteristics 信赖性试验项目

Item 项目	Requirement 条件	Test Method 测试方法
Temperature Coefficient of Resistance(T.C.R.) 温度系数(T.C.R.)	As Spec. 参考规格表	+25℃~+125℃
Load Life 负载寿命	< ±1%	1000hours at rated power,70℃ 1.5 hrs"ON" and 0.5 hrs "OFF" 70℃温度中施加额定电压,1.5 小时"开", 0.5小时 "关",共1000小时
Short Time Overload 短时间过负载	< ±0.5%	5 X rated power for 5s 额定功率*5倍，持续5秒
Moisture no Load 水分空载	< ±1%	85℃,85%RH,1000hrs 85℃,85%RH,持续1000小时
Temperature Cycle 温度循环	< ±0.5%	−55℃ &+155℃，300cycle，15min per extreme condition −55℃ &+155℃，极端条件下每次15分钟，共300次
Resistance to Soldering Heat 耐热性试验	< ±0.5%	260 ± 5℃ for 20 ± 1 seconds 260 ± 5℃锡炉中，持续20 ± 1秒
Solderability 焊锡性	95% min. coverage 导体爬锡面积大于95%	245 ± 5℃ for 2 ± 0.5 seconds 245 ± 5℃锡炉中，持续2 ± 0.5秒
High Temperature Exposure 高温曝光	< ±1%	170℃,1000hrs 170℃,持续1000小时
Low Temperature Storage 低温存储	< ±0.5%	−55℃，1000hrs −55℃,,持续1000小时
Substrate Bending 基板弯折强度	< ±1%	Bending width 2mm 弯折宽度 2mm
Insulation Resistance 绝缘阻抗	≥100MΩ	100V DC for 1 minute 100V DC，持续1分钟

Operating Voltage=√(P*R) or Max.Operating Voltage listed above,whichever is lower.
Overload Voltage=2.5*√(P*R) or Max.Overload Voltage listed above,whichever is lower.
RCWV(Rated Continuous Working Voltage)=√(P*R) or Max. Operating Voltage whichever is lower.
Storage Temperature:25 ± 3℃; Humidity < 80%RH
Reference Standards:IEC 60115-1,60068-2-58;JIS-C 5201-1
■RCWV(额定持续工作电压)=√(P*R) 或者较小的最大操作电压.
操作电压=√(P*R) , 过负载电压=2.5*√(P*R) ,操作电流=√(P/R)
■储存温度:25 ± 3℃; 湿度 < 80%RH
■依据标准:IEC 60115-1,60068-2-58;JIS-C 5201-1

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