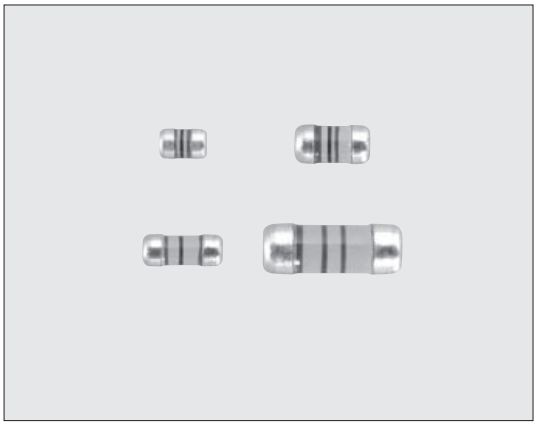
EU RoHS

RD41 MELF型碳膜固定电阻器
MELF Type Fixed Carbon Film Resistors



外观颜色：象牙色
Coating color：Ivory
表示：颜色码（3色带）
Marking：3 line color code

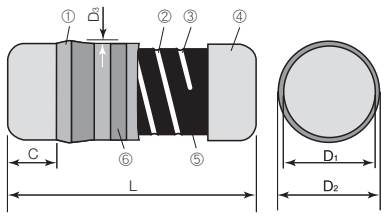
■ 特点 Features

- 是表面封装的碳膜电阻器。
- 由于是圆筒形，没有安装时的方向性。
- 电极强度牢固。
- 防噪声特性优异。
- 对应回流焊、波峰焊、烙铁焊接。
- 端子无铅电镀品，符合欧盟RoHS。
- RD41 is SMD carbon film resistors.
- Free direction for mounting due to cylindrical design.
- The electrode strength is firm.
- The noise characteristic is excellent.
- Suitable for reflow, flow and iron solderings.
- Products with lead free termination meet EU-RoHS requirements.

■ 参考标准 Reference Standards

IEC 60115-8
JIS C 5201-8
EIAJ RC-2131A

■ 结构图 Construction



①	绝缘涂层	Insulation coating	⑤	电阻膜	Resistive film
②	调阻线	Trimming line	⑥	表示	Marking
③	陶瓷管体	Ceramic core			
④	电极帽	Electrode cap			

■ 外形尺寸 Dimensions

型号 Type (Inch/DIN Size Code)	尺寸 Dimensions (mm)					Weight (g) (1000pcs)
	L	C	D_1	D_2 Max.	D_3 Max.	
RD41 2A (0805/0102)	2.0±0.1	0.3Min.	1.25±0.05	1.35	0.07	11
RD41 2D (1206/0203)	3.2±0.2	0.5Min.	1.55±0.15	1.75	0.1	26
RD41 2ES (1406/0204)	3.5±0.2	0.5～0.9	1.4±0.1	1.55	0.1	20
RD41 2E (2309/0207)	5.9±0.2	0.5Min.	2.2±0.1	2.4	0.15	75

■ 品名构成 Type Designation

实例 Example

RD41	2ES	T	TE	103	J
品种 Product Code	额定功率 Power Rating	端子表面材质 Terminal Surface Material	二次加工 Packaging	公称电阻值 Nominal Resistance	阻值允许偏差 Resistance Tolerance
	2A:0.125W 2D:0.2W 2ES:0.25W 2E:0.25W	T:Sn （L:Sn/Pb）	TE:编带 TE:Taping BK:散装 BK:Bulk	3 digits	G:±2% J:±5%

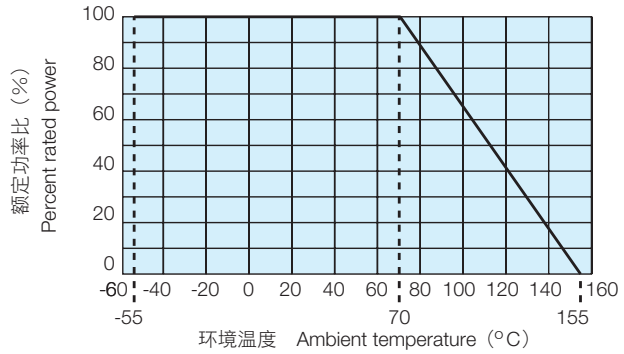
欲知关于此产品含有的环境负荷物质详情（除EU-RoHS以外），请与我们联系。
编带细节请参考卷末附录C。
Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS.
For further information on taping, please refer to APPENDIX C on the back pages.

■ 额定值 Ratings

型 号 Type	额定功率 Power Rating	电阻值范围 Resistance Range (Ω) E24	阻值允许偏差 Resistance Tolerance	最高使用电压 Max. Working Voltage	最高过载电压 Max. Overload Voltage	额定环境温度 Rated Ambient Temperture	使用温度范围 Operating Temperture Range	二次加工和包装数量/卷 Packaging & Q'ty/Reel (pcs)	
								箱 Box	卷 Reel
RD41 2A	0.125W	2.2～1M	G:±2% J:±5%	150V	200V	+70℃	−55℃～+155℃	50,000	3,000
RD41 2D	0.2W	1.0～1M		200V	400V			36,000	2,000
RD41 2ES	0.25W	2.2～1M		200V	400V			40,000	3,000
RD41 2E	0.25W	1.0～2.2M		300V	600V			10,000	1,500

额定电压是$\sqrt{额定功率 \times 公称电阻值}$所算出的值或表中最高使用电压两者中小的值为额定电压。
Rated voltage = $\sqrt{\text{Power Rating} \times \text{Resistance value}}$ or Max. working voltage, whichever is lower.

■ 负荷减轻特性曲线　Derating Curve



在环境温度70℃以上使用时，应按照左图负荷减轻特性曲线，减小额定功率。
For resistors operated at an ambient temperature of 70ºC or above, a power rating shall be derated in accordance with the above derating curve.

■ 性能　Performance

试验项目 Test Items	标准值　Performance Requirements ΔR±（%+0.05 Ω）		试验方法 Test Methods
	保证值　Limit	代表值　Typical	
电阻值 Resistance	在规定的允许偏差内 Within specified tolerance	–	25℃
电阻温度系数 T.C.R.	在规定值以内 Within specified T.C.R.	–	+25℃/−55℃ and +25℃/+125℃
过载（短时间） Overload（Short time）	1	0.5	额定电压×2.5倍施加5秒钟 Rated voltage ×2.5 for 5s
断续过负荷 Intermittent overload	1	–	额定电压的4倍或最高断续过负荷电压中低的一方施加一万次（2A是3倍） Rated voltage×4 (2A×3) or Max. Intermittent overload voltage, whichever is lower, 10,000 cycles. 最高断续过负荷电压　2A:300V, 2ES:400V, 2D:500V, 2E:600V Max. Intermittent overload voltage　2A:300V, 2B:400V, 2D:500V, 2E:600V
耐焊接热 Resistance to soldering heat	1	0.5	260℃±5℃, 10s±1s
温度突变 Rapid change of temperature	1	0.75	-55℃ (30min.) /+125℃ (30min.) 5 cycles
耐湿负荷 Moisture resistance	5	2.5	40℃±2℃, 90%～95%RH, 1000h 1.5小时ON、0.5小时OFF的周期　1.5h ON/0.5h OFF cycle
在70℃时的耐久性 Endurance at 70℃	2	1	70℃±2℃, 1000h 1.5小时ON、0.5小时OFF的周期　1.5h ON/0.5h OFF cycle
低温放置 Low temperature exposure	1	0.75	−55℃, 1h
高温放置 High temperature exposure	2	1	+125℃, 100h

■ 使用注意事项　Precautions for Use

- 助焊剂等在本产品和安装的印刷电路板上附着离子性杂质时，其耐湿性•耐腐蚀性将受到影响。助焊剂内有时含有氯•酸等离子性物质。为除去这些离子性物质应进行清洗。特别是使用无铅助焊剂时，由于湿润性提高了，有时会含有大量离子性物质，所以在使用RMA系的焊锡或助焊剂时，应充分进行清洗。并且，在保管环境和安装条件、环境等，附着了汗•盐等离子性物质时，其耐湿性•耐腐蚀性也将受到影响。对于这种污染，为了除去这些离子性物质，应当进行清洗。
- Ionic impurities such as flux etc. that are attached to these products or those mounted onto a PCB, negatively affect their moisture resistance, corrosion resistance, etc. The flux may contain ionic substances like chlorine, acid, etc. Please wash them to get rid of these ionic substances especially when using lead-free solder that may contain much of the said substances for improving a wetting characteristic. Using RMA solder or RMA flux, or well-washing is needed. Also, attaching ionic substances such as perspiration, salt etc. by storage environments or mounting conditions/environments negatively affects their moisture resistance, corrosion resistance etc. Please wash them to remove the ionic substances when they are polluted.