

合金电流采样贴片电阻

Low Resistance Metal Strip Chip Resistors

深圳市业展电子有限公司



# 规格书

## SPECIFICATION FOR PRODUCT

Customer P/N

产品名称

Product Name Ultra Low Ohm Chip Resistors – YLR Series

产品规格

Product Type

申请承认日期版本

Apply Date 2020-07-09 REV.1.0

供货商属性  代理商  制造商 深圳市业展电子有限公司

Vendor Type Agency Manufacturer

Note: 禁止使用 1 级环境管理物质. 遵守 ACBEL "环境管理物质规范" 中所要求之含量标准.

Restrict use of hazardous substances of level 1; Comply with "Specification for Hazardous Substances and Materials Management" of ACBEL

供货商印鉴 Vendor Stamp	APPROVED	CHECKED	PREPARED	承认印鉴 Stamp

Mainland China: 深圳市业展电子有限公司

Shenzhen Yezhan Electronics Co., Ltd.

Add: 深圳市龙华区环观中路荣倡工业园 7 栋 4 楼

Tel: 0755-26517682 /18926048203

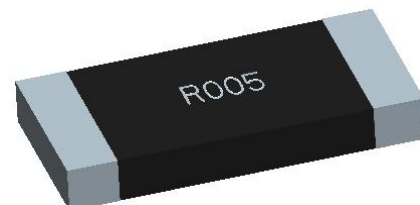
Fax: 0755-29500756

E-mail: caixiaojuan@yezhan.com.cn

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## YLR Series



### ★ 特征 Features

- 焊接结构产品设计 Welded construction product
- 阻值范围 Resistance range 1~150mR
- 额定功率 Rated power 1~5W
- 低寄生感值设计 Low inductance design
- 合金材质，耐冲击 Alloy Material, Shock Resistance
- 工作温度范围 Operating temperature range : -65°C~170°C
- AEC-Q200 qualified

### ★ 用途 Applications

- 电流取样 Current sensing application
- 过流保护 Over current protection
- 伺服电机控制电路 Servo motor control circuits
- 变频电源 Inverter power
- 电子控制系统 Electric control system
- 锂电池控制板 Li-battery management system

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## Low Resistance Metal Strip Chip Resistors

### (1) 订购信息 Ordering Information

YLR	12	-3	-10	F
类型	封装	功率	阻值	精度
Type	Size	Power	Resistance	Tolerance
YLR	06 : 1206 12 : 2512 17 : 2817 28 : 2728 37 : 3637 20 : 4320	Unit : W	Unit : mΩ	J : ±5% G : ±2% F : ±1% D : ±0.5%

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### (2) 标准电气规范 Standard Electrical Specifications

尺寸 Size	功率 <sup>(1)</sup> Power(W)		阻值 Resistance/m Ω	温漂 TCR (ppm/°C)	材料 Material	工作温度 Operating Temperature (°C)
	P70°C	P120°C	±0.5%, ±1%, ±2%, ±5%			
1206	1, 2	/	1~30	±50	Manganin	-65°C~170°C
2512	2, 3	/	1~4	±75		
			5~150	±50		
2817	4, 5	/	1~4	±75		
			5~100	±50		
2728	5	/	1~2	±75		
			3~100	±50		
3637	5	/	1~2	±75		
			3~100	±50		
4320	/	5	5~20	±50		

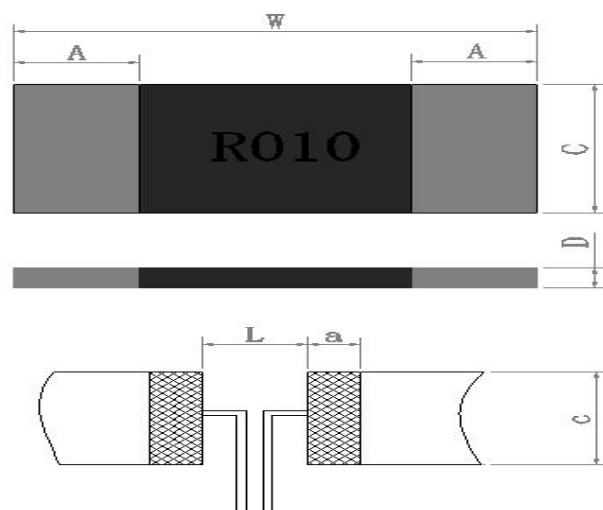
Note : (1) 各种尺寸产品在不同环境温度下额定功率试验陆续验证中。Products of different sizes are being verified by power rating tests at other ambient temperatures.

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### (3) 产品尺寸和推荐焊盘尺寸 Products & Recommend Pad Dimension



Unit : mm

Type	Resistance	W±0.2	C±0.2	A±0.2	D±0.1	L	a	c
1206	1	3.2	1.6	1.1	0.8	1.0	2.3	1.8
	2~100			0.5				
2512	1	6.35	3.2	2	0.8	1.3	3.1	4
	2~150			0.9				
2817	1~4	7.1	4.3	1.2	0.8	3.5	2.7	5.2
	5~100							
2728	1~2	6.8	7.2	1.2	1.0	2	4.0	7.8
	3~100				0.8		4.5	
3637	1~2	9.14	9.4	3.4	0.8	2	4.0	9.9
	3~100			2.2			4.5	
4320	5~20	11.0	5.0	2.36	0.8	5.0	14	5.75

### (4) 字码 Marking

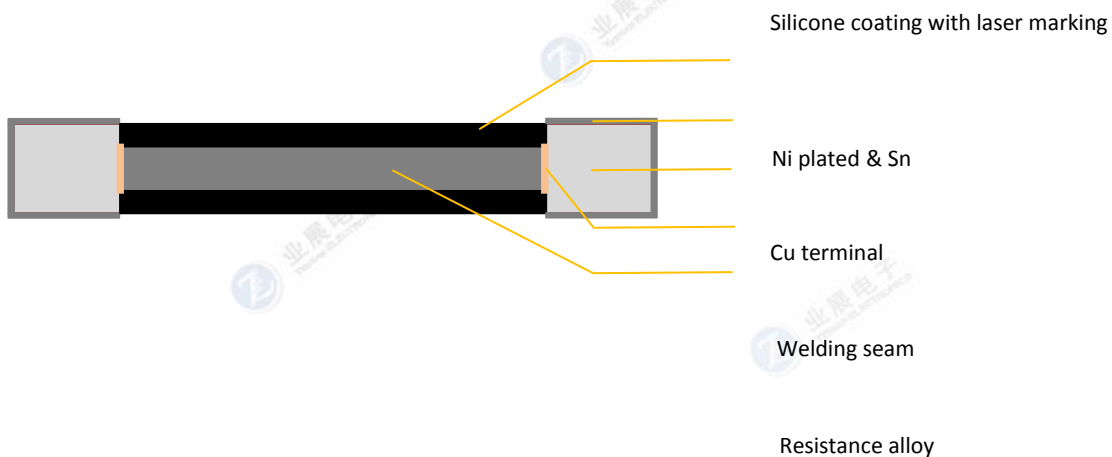
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### Low Resistance Metal Strip Chip Resistors

- 激光字码； Laser Marking
- All the products marking are 4 digits
- 'R' designates the decimal location in ohms
  - e.g.  $3\text{m}\Omega = \text{R003}$
  - $100\text{m}\Omega = \text{R100}$
- 标准品为激光字码，如需白色丝印字码，请咨询业展销售团队。Laser marking is default. If need white printed marking, pls contact Yezhan sales team.

#### ( 5 ) 焊接结构图 Welded Construction



#### ( 6 ) 性能参数 Performance Characteristics

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## Low Resistance Metal Strip Chip Resistors

Items	Additional Requirements	Reference	Limits
Temperature Cycling	1000 Cycles (-55°C to +150°C)	JESD22 Method JA-104	±0.5%
High Temperature Exposure	1000hrs.@T=125°C.Unpowered.	MIL-STD-202 Method 108	±0.5%
Moisture Resistance	t=24hrs/cycle.Note: Steps 7a & 7b not required. Unpowered.	MIL-STD-202 Method 106	±0.5%
Biased Humidity	1000hrs 85°C/85%RH. Note: Specified conditions:10% of operating power.	MIL-STD-202 Method 103	±0.5%
Operational Life	Condition D Steady State TA=125°C at rated power.	MIL-STD-202 Method 108	±0.5%
Thermal Shock	1000X(-55°C to +150°C)	MIL-STD-202M ethod107G	0.5%
Solderability	235°C±5°C,2s±0.5s	J-STD-202	95% Coverage Minimum
Resistance to Soldering Heat	260°C±5°C , 10s±1s	MIL-STD-202 Method 210	±0.5%
Short Time Overload	5×Rated power for 5 s	MIL-STD-202 Method 201	±0.5%
Shock	100g , 6ms , axes Z and Y , 10 Shocks per axis	MIL-STD-202 Method 213	0.5%
VIBRATION	(10 - 2000 HZ) , 20g @0.1ms	MIL-STD-202M ethod204	0.5%

### ( 7 ) 降功率曲线 Power Derating Curve

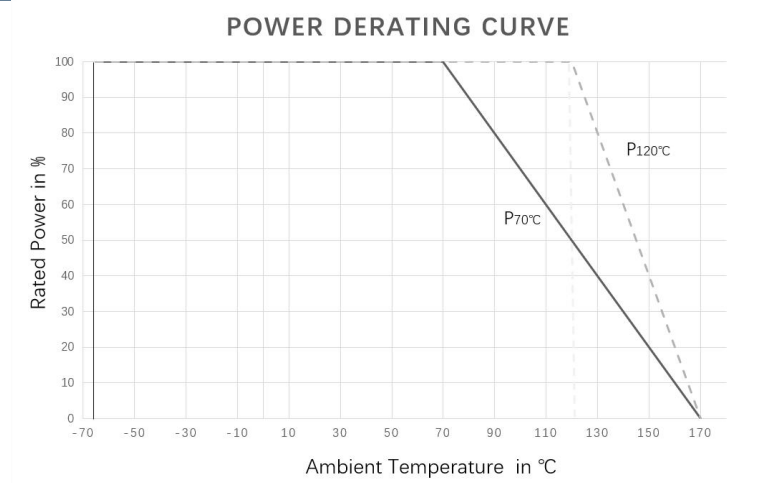
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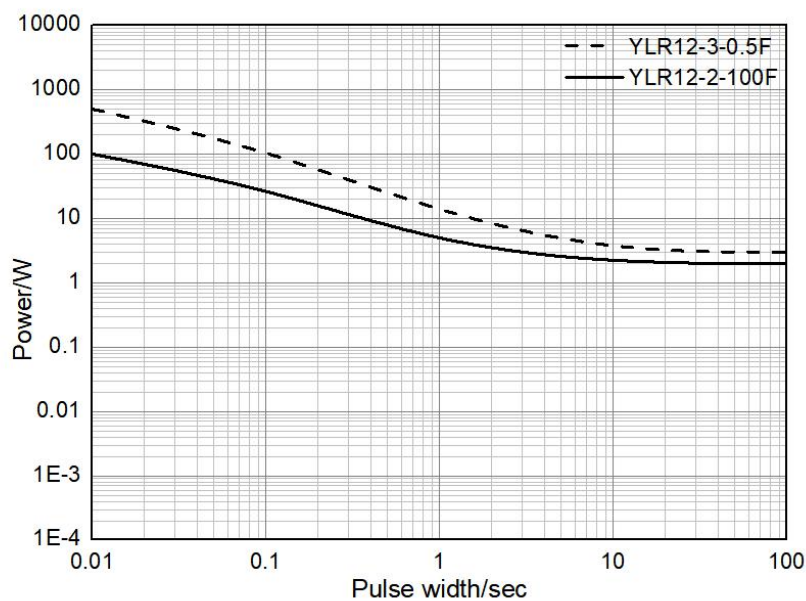
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### (8) 瞬间脉冲能力曲线图 Pulse Capability Curve



### (9) 包装 Packing

储藏条件 Storage Conditions: Temperature:5°C~35°C, Humidity:40%~75%

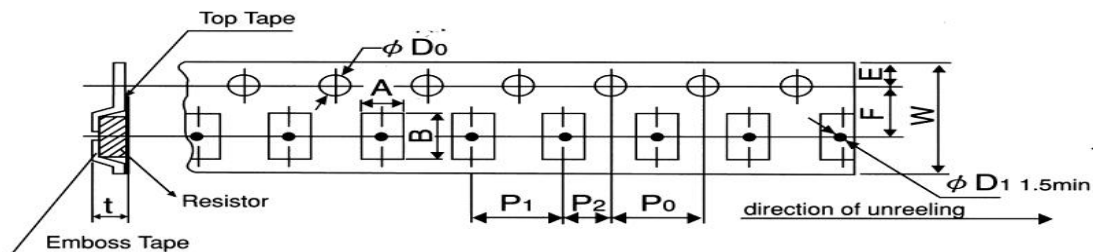
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编带盘装：Embossed Plastic Tape



Type	A	B	W	F	E	P <sub>1</sub>	P <sub>2</sub>	P <sub>0</sub>	D <sub>0</sub>	t	Qty/reel
YLR06	2.0	3.6	8	3.5	1.7	4	2.0	4.0	Φ1.5	0.84	5000
YLR12	3.6	6.9	12	5.5	1.75	4	2.0	4.0	Φ1.5	1.2	3000
YLR17	4.8	7.2	16	7.5	1.75	6	2.0	4.0	Φ1.5	1.2	1500
YLR28	7.2	7.7	16	5.5	1.75	8	2.0	4.0	Φ1.5	1.2	1000
YLR37	9.8	9.6	24	11	1.75	12	2.0	4.0	Φ1.5	1.2	1000
YLR20	5.3	11.3	24	11.5	1.75	12	2.0	4.0	Φ1.5	1.2	3000

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### ( 9 ) 版本 Version

Version	Date	Description of amendment	Remarks
1	09-Jul-2020	First issue for this specification	



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