

U型分流器电阻-USR Series

Shunt Resistors – USR Series



业展电子
YEZHAN ELECTRONICS

特征 Features

精度 $\pm 1\%$, $\pm 0.5\%$	Tolerance $\pm 1\%$ $\pm 0.5\%$
过电流能力强	High current ability
电子束焊接工艺	Electron-beam welding
电感小于5纳亨	Low inductance
引脚镀锡易于锡焊	Solderable copper leads
符合ROHS要求	RoHS Compliant
符合AEC-Q200	AEC-Q200 qualified.
特殊规格可以订做	Customizable



应用范围 Applications

电流采样	Current Sensing
驱动技术	Drive technology
功率电子	Power Electronic
家电控制器	Home Appliance
汽车电子	Automotive electronics
通讯系统	Communication System

订购信息 Ordering Information

USR	-U	-100	-50	F	-X1
Product Type	Shape	Current:	Voltage	Tolerance:	Other:
USR UBH	U: U-shape M: M-shape	Unit: A	Unit: mV	J: $\pm 5\%$ G: $\pm 2\%$ F: $\pm 1\%$ D: $\pm 0.5\%$	X1: Pin tinning

说明 Notice

适用范围 Scope

本承认书适用于深圳市业展电子有限公司 制造之[U型分流器电阻]。

This specification is available for Shunt Resistors manufactured by Shenzhen Yezhan Electronics Co., Ltd.

标准试验状态 Standard measuring conditions

温度 $20\pm 2^{\circ}\text{C}$ 、湿度 $65\pm 5\%$ 。但在温度 $5\sim 35^{\circ}\text{C}$ 、湿度 $45\sim 85\%$ 之情况下，仍可给予判定。

Temperature $20\pm 2^{\circ}\text{C}$, Humidity $65\pm 5\%$. Being no doubt about the judgment, measurements can be made within the following Temperature $5\sim 35^{\circ}\text{C}$, Humidity $45\sim 85\%$.

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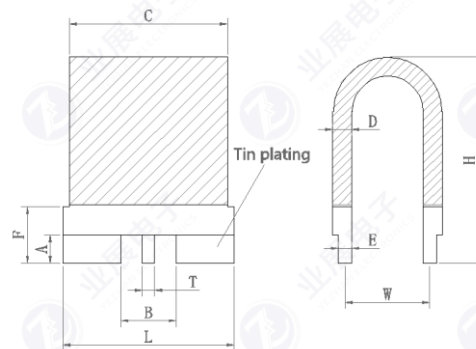
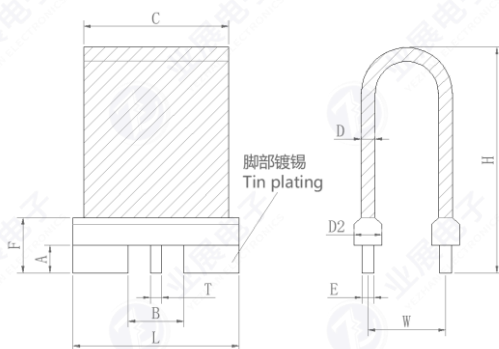
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产品尺寸 Products Dimension

Type	Data	L±0.2	W±0.5	D±0.1	C±1	H±2	A±0.2	B±0.1	T±0.1	E±0.1	F±1	D2±0.1
USR	40A 150mV	12	25	1	7	24	3	5.8	1.2	1.3	6	3
	40A 100mV	18	8.4	1.0	10	33	3	5.8	1.2	1.3	6	3
	50A 75mV	18	8.4	1.5	11	33	3	5.8	1.2	1.3	6	3
	50A 100mV	18	8.4	1.0	12.5	33	3	5.8	1.2	1.3	6	3
	65A 50mV	18	8.4	1.5	15.5	25	3	5.8	1.2	1.3	6	3
	75A 50mV	18	8.4	1.7	15.5	25	3	5.8	1.2	1.3	6	3
	100A 50mV	18	8.4	1.5	15.5	17	3	5.8	1.2	1.3	6	3
	100A 75mV	18	8.4	1.5	15.5	25	3	5.8	1.2	1.3	6	3
	100A 100mV	18	8.4	1.5	16.5	33	3	5.8	1.2	1.3	6	3
	200A 100mV	18	10.5	3.0	16.5	34	3	5.5	1.4	1.5	6	4

USR

UBH



Type	Data	L±0.2	W±0.5	D±0.1	C±1	H±0.5	A±0.2	B±0.1	T±0.1	E±0.1	F±1
UBH	45A 45mV	12	8.4	1.2	11	20	3	5.8	1.4	1.2	6
	80A 40mV	15	6.4	2.0	14	22	3	5.8	1.4	1.5	6
	100A 50mV	18	10.5	2.0	17.2	24	3	6	1.4	1.4	6
	100A 100mV	18	8.4	1.0	18	22	3	6	1.2	1.0	6
	200A 75mV	18	8.4	3.0	15.5	26	3	5.5	1.4	1.5	6
	300A 75mV	18	10.5	3.0	18	26	3	5.8	1.4	1.5	6

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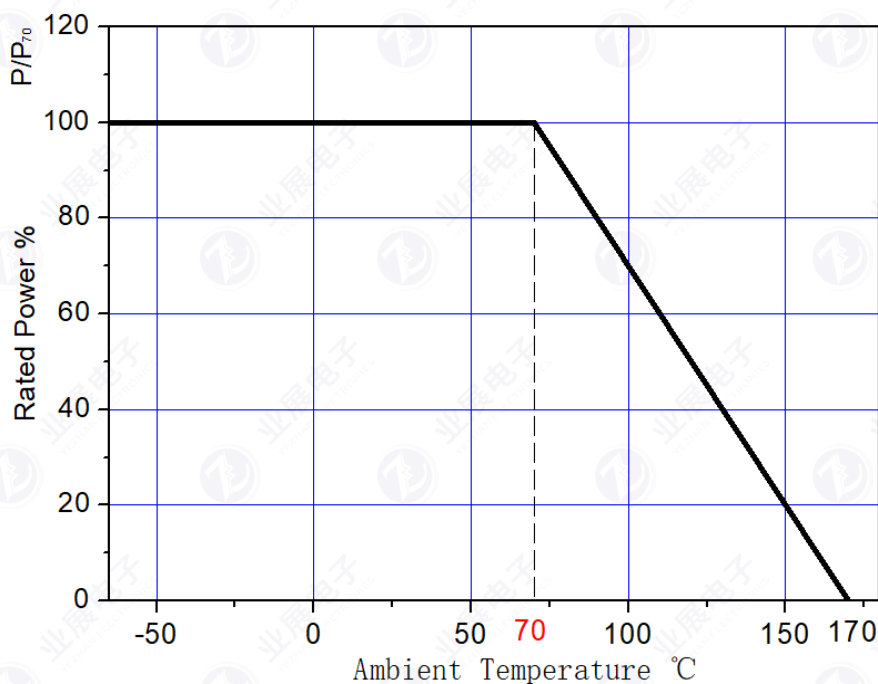


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技术参数 Technical Data

Type	USR/UBH
Resistance(Unit: mΩ)	0.3~30
Tolerance	±0.5%、±1%、±2%、±5%
Recommended applicable temperature range	-65℃ to +170℃
Rated current (Unit: A)	5~300
Temperature coefficient (20℃~120℃)(Unit: ppm/℃)	±50
Material	Manganin

降功率曲线 Power Derating



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包装 Packing

Items	Additional Requirements	Reference	Limits
Temperature Cycling	1000 Cycles(-55°C to +125°C)	JESD22 Method JA-104	±0.5%
eHigh Temperature Exposure	100hrs.@T=170°C.Unpowered.	MIL-STD-202 Method 108	±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%
Solderability	245°C±5°C, 5s±0.5s	MIL-STD-202 Method 208H	95% Coverage Minimum
Vibration	5 g's for 20 min, 12 cycles each of 3 orientations. Note: Use 8"X5" PCB .031" thick 7 secure points on one long side and 2 secure points at corners of opposite sides. Parts mounted within 2" from any secure point. Test from 10-2000 Hz.	MIL-STD-202 Method 204	±0.5%
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 301	±0.5%

印字标识 Marking

100A 50mV

100A: 额定电流100A 50mV: 对应电压50mV

包装 Packing

散装或盘装 In Bulk or Blister Packing

版本信息 Version History

Version	Data	Description of amendment	Remarks
A1.0	22-Sept-2022	First issue	