

Metal Alloy Small-Resistance Resistor

Product Specification: SR1206 1W Type



FEATURES :

- ◆ Ideal for all types of current sensing, voltage division and Pulse applications including switching and linear power Supplies, Instruments, power amplifiers.
- ◆ Proprietary processing technique produces extremely low Resistance values.
- ◆ High-temperature performance (up to +275°C)
- ◆ Very low inductance 0.5nH to 5nH
- ◆ Excellent frequency response
- ◆ Low thermal EMF (<1uV/°C)
- ◆ Lead(Pb)-free construction is RoHS-compliant

1. Standard Electrical Specifications :

Model	Power Rating at 100 °C (Watts)	Resistance Range mΩ		
		0.5%(D)	1.0%(F)	5.0%(J)
SR1206-21	1	1~50	1~50	1~50

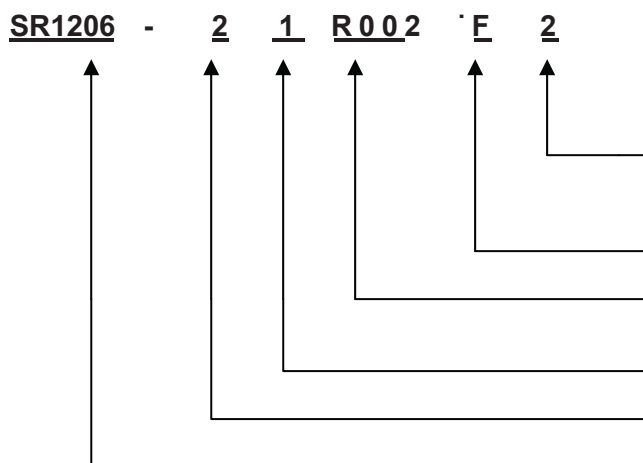
0.5 Watts with total solder pad trace size of 100mm²

2. Technical Specifications :

Parameter	Unit	SR1206-205 (mΩ)
Temperature Coefficient	ppm /°C	1~4= +50
		5~15= -25
		16~50= -15
Operating Temperature Range	°C	-65 ~ + 275
Maximum Working Voltage	V	$(P \times R)^{1/2}$

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Ordering Information :


Packing

2 =Tape & Reel ; B=Bulk Pack

2 =2,000 Pcs

Tolerance

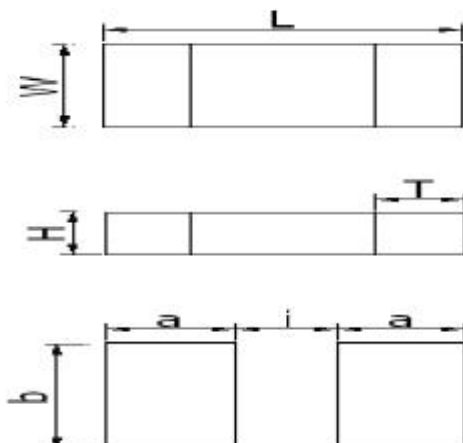
D=±0.5% ; F=±1.0% ; J=±5.0%

Resistance

EX : R002=2mΩ ; R010=10mΩ

Power Rating (Watts)
Number of Terminals
Model (Size)

3. Dimensions :

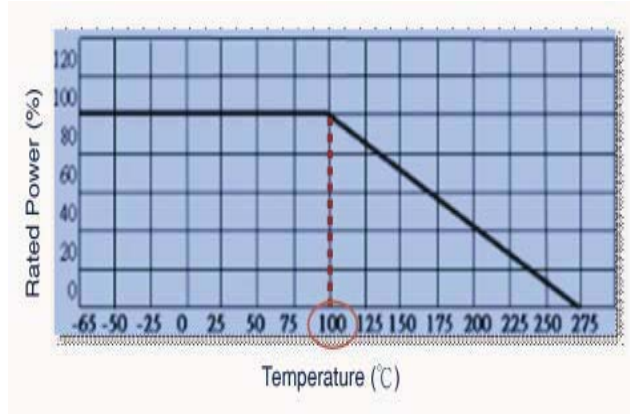


Model	DIMENSIONS - in inches (millimeters)				
	Resistance Range mΩ	L	W	H	T
SR1206-21	1 ~50	0.12±0.010 (3.15±0.254)	0.062±0.010 (1.60±0.254)	0.029±0.010 (0.750±0.254)	0.02±0.010 (0.50±0.254)

Model	SOLDER PAD DIMENSIONS - in inches (millimeters)			
	Resistance Range mΩ	a	b	i
SR1206-21	1 ~ 50	0.063(1.60)	0.086(2.18)	0.026(0.66)

 Remark : 1 Watts with total solder pad trace size of 100 mm²

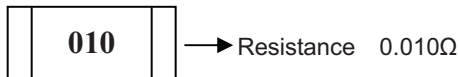
4. Power Derating Curve :



5. Performance :

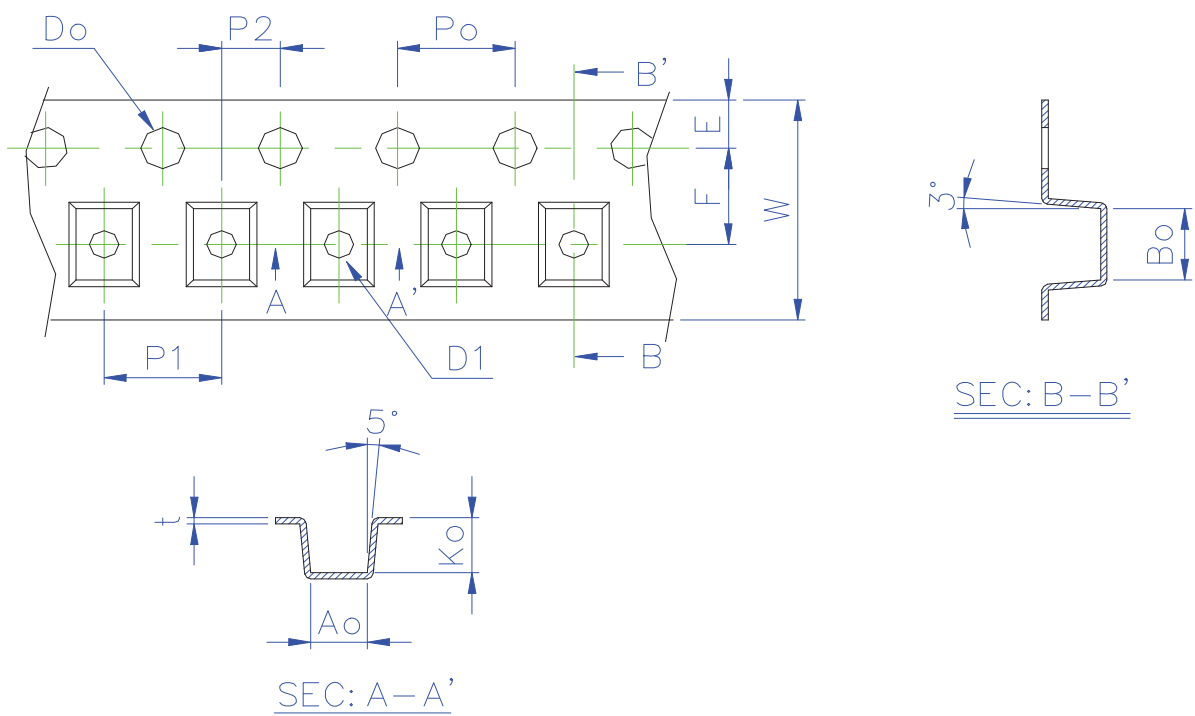
Test Item	Conditions of test	Test Method	Test Limits
Short Time Overload	0.5W 4x rated power for 5 seconds	JIS C5202 5.5	$\pm(0.5\%+0.0005\Omega)\Delta R$
Resistance to Solder Heat	Solder temp./immersion time:260±5°C,10±1secs and 350±10°C,3.5±0.5secs	JIS C5202 6.4	$\pm(0.5\%+0.0005\Omega)\Delta R$
Solderability test	Steam aging:4 hrs, cool down 30 minutes then test	JIS C5202 6.5	95% coverage
Vibration	Frequency varied 55Hz in one minute , 3 directions , 12 hours	JIS C5202 6.7	$\pm(0.5\%+0.0005\Omega)\Delta R$
Resistance to solvent	Immersion time:60±5 secs,20°C ~25 °C	JIS C5202 6.9	$\pm(0.5\%+0.0005\Omega)\Delta R$
Mechanical Shock	100 grams for 6 milliseconds, 5 pulses	JIS C5202 6.13	$\pm(0.5\%+0.0005\Omega)\Delta R$
Low Temperature Storage	-55°C for 1000 hours	JIS C5202 7.1	$\pm(0.5\%+0.0005\Omega)\Delta R$
High Temperature Exposure	1000 hours @ + 155°C	JIS C5202 7.2	$\pm(1.0\%+0.0005\Omega)\Delta R$
Thermal Shock	- 55 °C to + 125 °C , 1000 cycles , 15 minutes at each extreme	JIS C5202 7.4	$\pm(0.5\%+0.0005\Omega)\Delta R$
Moisture Resistance	Mil-STD-202 , Method 106 , 0% power , 7a and 7b not required	JIS C5202 7.6	$\pm(0.5\%+0.0005\Omega)\Delta R$
Bias Humidity	+ 85°C , 85% RH, 10% Bias, 1000 hours,90 minutes "ON",30 minutes "OFF"	JIS C5202 7.9	$\pm(0.5\%+0.0005\Omega)\Delta R$
Load Life	1000 hours @ rated power, + 100°C , 1.5 hours "ON" , 0.5 hours "OFF"	JIS C5202 7.10	$\pm(1.0\%+0.0005\Omega)\Delta R$

6. Marking :



7. Packaging :

Model	Reel			
	Tape Width	Diameter	Pieces/Reel	Code
SR1206	8mm/Embossed Plastic	178mm/7"	2,000	2



Unit: mm

Item	W	P1	E	F	Do	D1	P0	Po*10	P2	Ao	Bo	Ko	t
Spec.	8.00	4.00	1.75	3.50	1.50	1.00	4.00	40.00	2.00	1.85	3.50	1.00	0.22
Tole.	±0.10	±0.10	±0.10	±0.05	+ 0.10 - 0.00	±0.10	±0.05	±0.10	±0.05	±0.10	±0.10	±0.05	±0.05

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