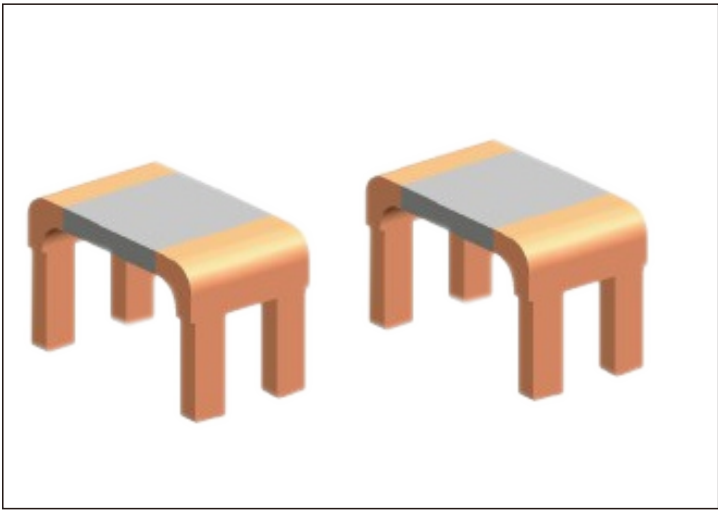


SBH精密采样电阻 Alloy Shunt Resistors



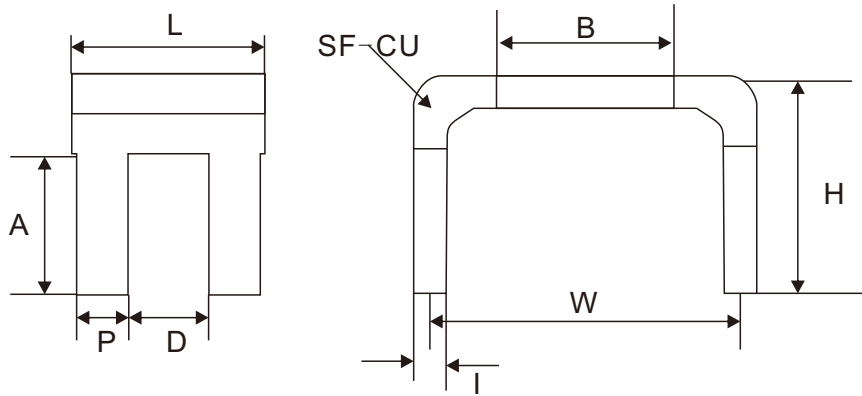
● 特性 Features

- I. $\pm 1\%$ 或 $\pm 5\%$ 精度
Tolerance $\pm 1\%$ or $\pm 5\%$
- II. 电阻温度系数
TCR $\pm 20\text{ppm}/^\circ\text{C}$ 或 $\pm 50\text{ppm}/^\circ\text{C}$
- III. 阻值低至 $0.0003\ \Omega$
Resistance values down to $0.0003\ \Omega$
- IV. 电感小于10纳亨
Low Inductance
- V. 温度应用范围 -55 to $+170^\circ\text{C}$
High application temperature range -55 to $+170^\circ\text{C}$
- VI. 符合 ROHS 要求
Lead-free
- VII. 特殊规格可以订做
Special tight tolerance are available on request

● 应用 Applications

- I. 电流采样 Current Sensing
- II. 反馈电路 Feedback
- III. 低电感电路 Low Inductance
- IV. 大电流脉冲电路 Surge and pulse
- V. 汽车市场的高电流应用
High current applications for the automotive market
- VI. 变频器 Frequency converters
- VII. 电源模块 Power modules

● 尺寸 Dimensions



规格 Type	功率 (W)	电阻 Resistance	尺寸(mm)							
			$B \pm 0.3$	$W \pm 0.2$	$L \pm 0.3$	$A \pm 0.5$	P	$H \pm 1.0$	D	I
SHB-M-R0003	3W	0.3mR	4.9	8.3	5.3	3.8	1.3	5.0	1.8	1.43
SHB-M-R0005		0.5mR	4.9	8.3	5.3	3.8	1.3	5.0	1.8	0.86
SHB-M-R001		1mR	4.9	8.3	5.3	3.8	1.3	5.0	1.8	0.43
SHB-N-R001		1mR	4.9	8.3	5.3	3.8	1.3	5.0	1.8	1.30

● 参考规格 Reference Standards

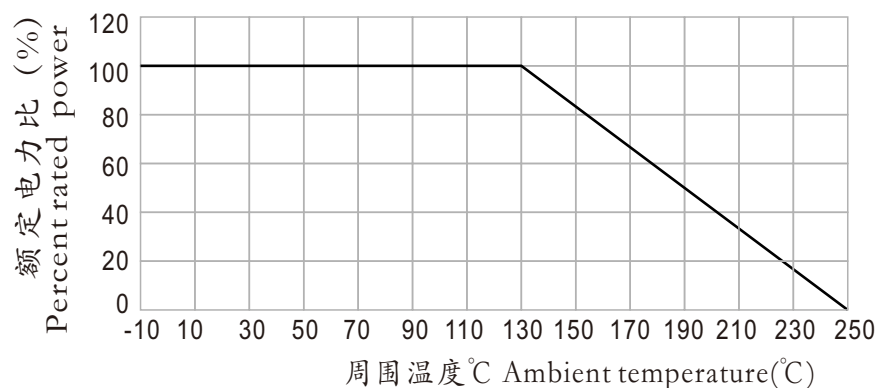
JIS C 5201-1

SBH精密采样电阻 Alloy Shunt Resistors

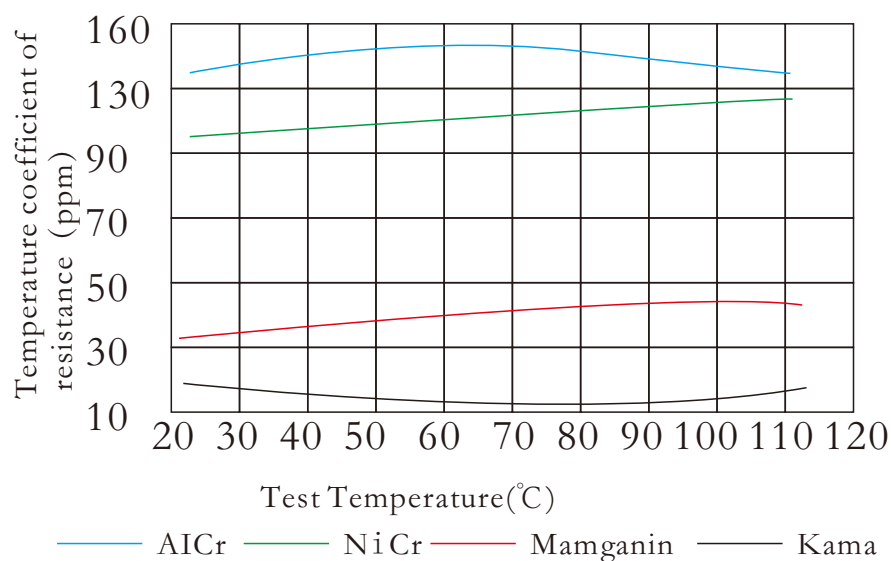
● 电气参数Electrical data

85°C 功率Power rating at 85°C (max) watts	3		
阻值范围Resistance range ohms	0.0003Ω	0.005	0.001

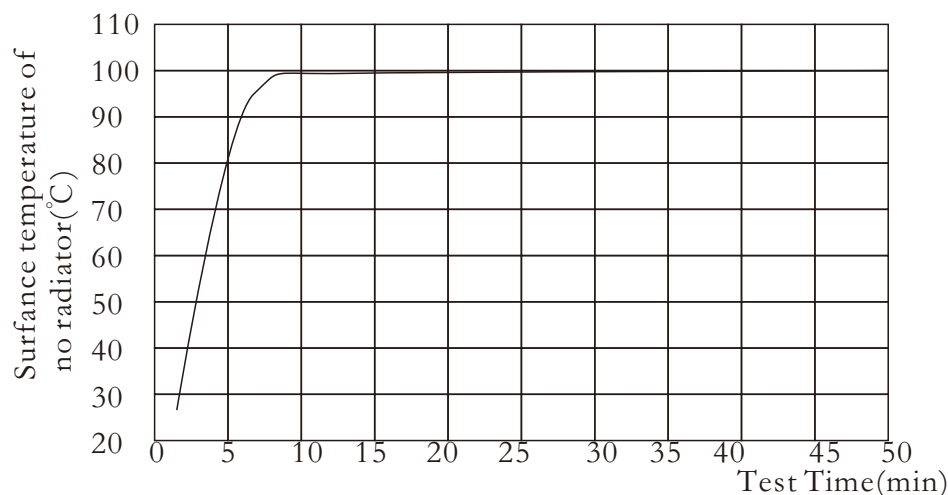
● 额定温度下降曲线图 Derating Curve



● 温度系数曲线图TCR Derating



● 表面温度图Surface temperature



● 性能 Performance

TEST	CONDITIONS OF TEST	TEST LIMITS
Thermal Shock	-55°C to 150 °C, 1000 cycles, 15 min at each extreme	$\Delta R \pm (1.0\%R + 0.0005\Omega)$
Shot time overload	5 x rated power for 5 s	$\Delta R \pm (0.5\%R + 0.0005\Omega)$
Low temperature storage	-65 °C for 45 min	$\Delta R \pm (0.5\%R + 0.0005\Omega)$
High temperature exposure	(1000 h) at +170 °C:	$\Delta R \pm (1.0\%R + 0.0005\Omega)$
Bias humidity	+85°C, 85% RH, 10% bias, 1000 h	$\Delta R \pm (0.5\%R + 0.0005\Omega)$
Mechanical shock	100 g's for 6 ms, 5 pulses	$\Delta R \pm (0.5\%R + 0.0005\Omega)$
Vibration	Frequency varied 10 Hz to 200 Hz in 1 min, 3 directions, 12 h	$\Delta R \pm (0.5\%R + 0.0005\Omega)$
Load life	(1000 h) at +70 °C: 1.5 h iON, 0.5 h uOFF	$\Delta R \pm (1.0\%R + 0.0005\Omega)$
Resistance to solder heat	+260 °C solder, 10 s to 12 s dwell, 25 mm/s emergence	$\Delta R \pm (0.5\%R + 0.0005\Omega)$
Moisture resistance	MIL-STD-202, method 106, 0 % power, 7a and 7b not required	$\Delta R \pm (0.5\%R + 0.0005\Omega)$

● 料号编号 Ordering Information

例 example

SBH	3	J	R0005
产品名称 Product Name	功率 Power	精度 Tol	阻值 Ohm
SBH精密采样电阻 Alloy Shunt Resistors	3=3W	F=±1% J=±5%	R0003=0.3mR R0005=0.5mR R001=1mR