



APPROVAL SHEET

SBH SERIES

Alloy Shunt Resistors

Version	Date	Description of amendment	Draft	Checked
A1.0	2022-09-29	First edition	邹文鉴	胡紫阳
A1.1	2026-01-14	Upgrade document templates	范荣丰	邓小辉

1. Product Description

Product name: SBH series

Description: SBH series Alloy Shunt Resistor provide precise current sensing with low TCR and high power, ideal for automotive and industrial applications.

1.1 Part Number Explanation

The part number of the high power precision resistor is identified by the type name, Element Material, Other, tolerance, and resistance value.

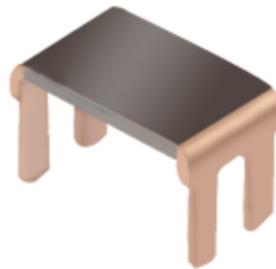
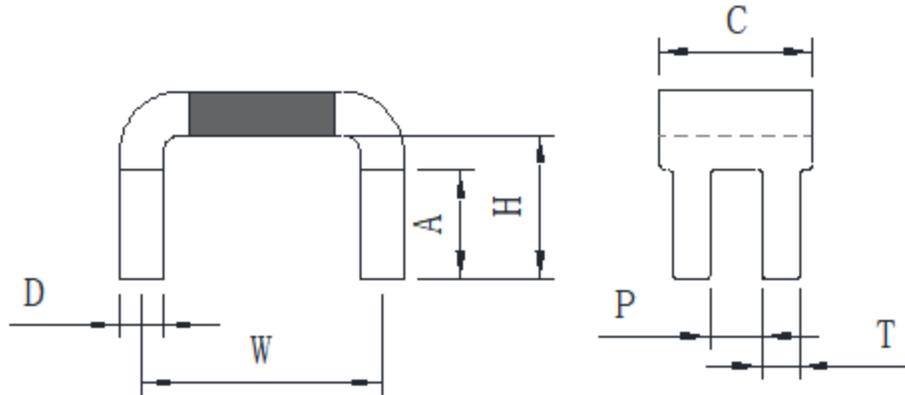
Example: SBH-K-R001-F

Type	Element Material	Resistance Value	Tolerance	Other
SBH	K=Karma M=Manganin	Unit: mΩ	D= ± 0.5% F= ± 1% G= ± 2% J= ± 5%	

- (1) **Type name:** SBH series
- (2) **Element Material:** K=Karma; M=Manganin
- (3) **Resistance Value:**
- (4) **Tolerance:** D= ± 0.5%; F= ± 1%; G= ± 2%; J= ± 5%
- (5) **Other:**



1.2 Products Dimension



Type	W (mm)	H (mm)	T (mm)	C (mm)	A (mm)	P (mm)
SBH	8.3±0.3	5±1	1.3±0.2	5.3±0.3	3.8±0.5	1.8±0.2

2. Technical Data

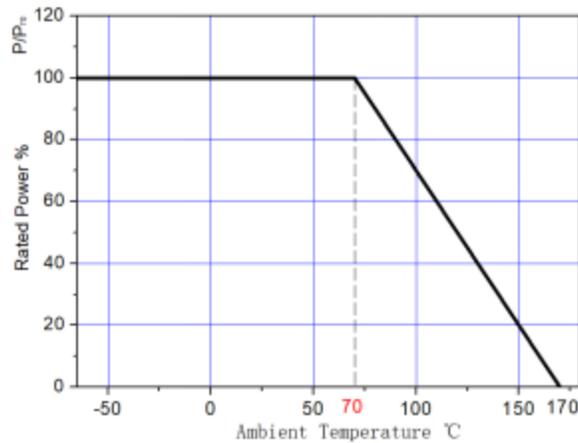
Type	Element Material	Resistance (mΩ)	D±0.1 (mm)	TCR (ppm/°C)	P70 °C (W)
SBH	M	0.25	1.5	±100	5
		0.3	1.34	±100	3
		0.4	1.04	±100	3
		0.5	0.83	±100	3



		0.7	0.59	± 100	3
		1	0.45	± 100	3
	K	1	1.16	± 50	5
		2	0.63	± 50	4
		3	0.43	± 50	3

*TCR (ppm/°C) : Test conditions at 20°C~120°C.

3. Power Derating



4. Endurance Test

Items	Additional Requirements	Reference	Limits
Temperature Cycling	1000 Cycles(-55°C to +125°C)	JESD22 Method JA-104	±0.5%
High 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
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%

5. Packing

散装 In bulk

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