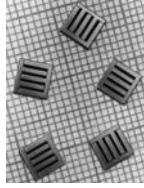


## Current Sensing Bondable Chip Resistors



### FEATURES

- Low ohmic value down to 0.05  $\Omega$
- Tolerance down to 1 %
- Stability 0.1 % < 2000 h at Pn at + 70 °C
- Low noise < 35 dB
- Low TCR 100 ppm/°C
- Wirebondable

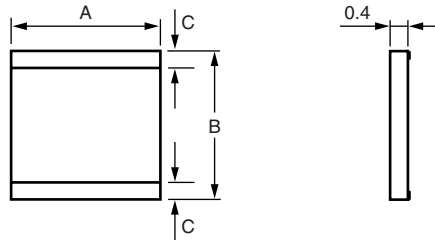


RoHS  
COMPLIANT  
**GREEN**  
[5-2008]\*

This thin film chip resistor fits applications as force balance scales, E beam deflection systems, switching power supplies, etc... all rely on current sensors to feed back and control the current.

Gold pads are compatible with thermosonic or ultrasonic bonding of gold and aluminium wires.

### DIMENSIONS in millimeters



SERIES DISSIPATION	POWER	DIMENSIONS		
		A	B	C
SA	0.5 W	1.5	1.5	0.2
SB	2 W	3	3	0.4
SC	6 W	5	5	0.5

### ELECTRICAL SPECIFICATIONS

**Ohmic values and associated tolerance:**

0.05  $\Omega \leq R < 0.2 \Omega \pm 5 \%$   
 0.2  $\Omega \leq R < 0.5 \Omega \pm 2 \%$   
 0.5  $\Omega \leq R < 1 \Omega \pm 1 \%$   
 higher values and higher tolerances on request

**Power dissipation at + 70 °C:** SA: 0.5 W  
 SB: 2 W  
 SC: 6 W

**Temperature coefficient:**  $\pm 100$  ppm/°C  
 $\pm 50$  ppm/°C on request

**Noise:** - 35 dB maximum

Low ohmic value chip resistors are also available with solderable or weldable wraparound terminations.

### MECHANICAL SPECIFICATIONS

**Substrate:** Alumina  
**Resistive element:** NiCr  
**Glassivation:** Ta<sub>2</sub>O<sub>5</sub>  
**Bonding pads:** gold  
**Backside metallization:** on request Ni Au

### ENVIRONMENTAL SPECIFICATIONS

**Operating temperature range:** - 55 °C to + 125 °C  
**Storage temperature:** - 55 °C to + 155 °C

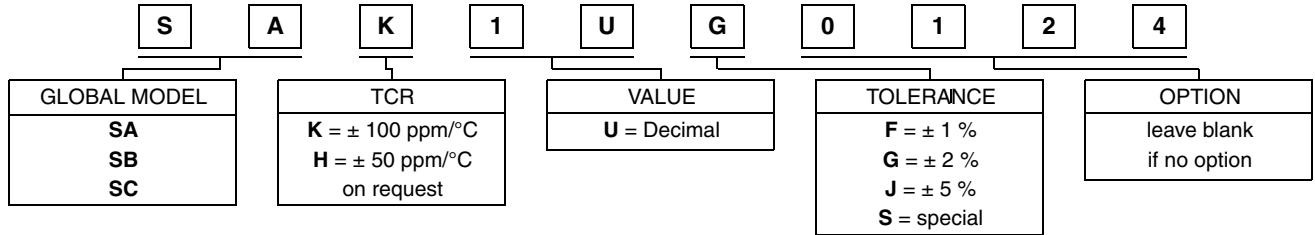
For standard sizes see our data sheet P Document Number: 53017 and ask us about performance.

\* Please see document "Vishay Green and Halogen-Free Definitions (5-2008)" <http://www.vishay.com/doc?99902>

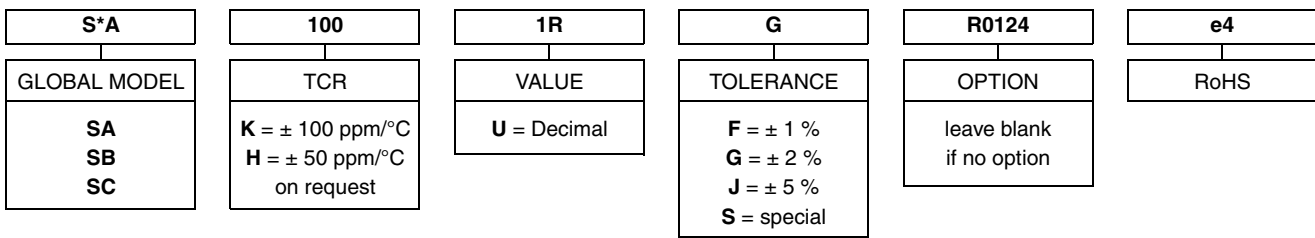


**GLOBAL PART NUMBER INFORMATION**

New Global Part Numbering: SAK1UG0124



Historical Part Number example: S\*A 100 1R G R0124 e4





## Disclaimer

All product specifications and data are subject to change without notice.

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