## Vishay Sfernice



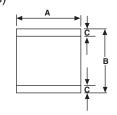
# **Current Sensing Bondable Chip Resistors**



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

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

## **DIMENSIONS** in inches (millimeters)





**FEATURES** 

 Stability · Low noise

Low TCR

Low ohmic value down to 0.05Ω

Tolerance down to 1%

| SERIES | POWER       | DIMENSIONS |     |     |
|--------|-------------|------------|-----|-----|
|        | DISSIPATION | Α          | В   | С   |
| SA     | 0.5W        | 1.5        | 1.5 | 0.2 |
| SB     | 2W          | 3          | 3   | 0.4 |
| SC     | 6W          | 5          | 5   | 0.5 |

#### **ELECTRICAL SPECIFICATIONS**

**Ohmic Values and** 

**Associated Tolerance:**  $0.05\Omega \le R < 0.2\Omega \pm 5\%$ 

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

Power Dissipation at + 70°C: SA: 0.5W

SB: 2W SC: 6W

**Temperature Coefficient:** ± 100ppm/°C

± 50ppm/°C on request

- 35dB max. Noise:

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

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

#### **MECHANICAL SPECIFICATIONS**

Substrate: Alumina **Resistive Element:** Ni Cr 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

| ORDERING INFORMATION |      |                                      |             |               |  |
|----------------------|------|--------------------------------------|-------------|---------------|--|
| S                    | Α    | 100                                  | OR 25       | ± 1%          |  |
| SERIES               | TYPE | TEMPERATURE COEFFICIENT<br>IN ppm/°C | OHMIC VALUE | TOLERANCE     |  |
|                      | Α    | $K = \pm 100 ppm/^{\circ}C$          |             | $F = \pm 1\%$ |  |
|                      | В    | $H = \pm 50$ ppm/°C                  |             | $G = \pm 2\%$ |  |
|                      | С    | on request                           |             | $J = \pm 5\%$ |  |
|                      |      |                                      |             | S = special   |  |