End of Life - Last Available Purchase Date: 20-September-2020



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# **Current Sensing Wirebondable Thin Film Chip Resistors**



### LINKS TO ADDITIONAL RESOURCES



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 aluminum wires.

## **FEATURES**

- Low ohmic value down to 0.05 Ω
- Tolerance down to 1 %
- Stability 0.1 % < 2000 h at Pn at +70 °C</li>
- Low noise < -35 dB</li>
- Low TCR 100 ppm/°C
- Wirebondable
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



SA, SB, SC

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(5-2008)

STANDARD ELECTRICAL SPECIFICATIONS							
MODEL	SIZE	RESISTANCE RANGE Ω	RATED POWER P <sub>70 °C</sub> W	TOLERANCE ± %	TEMPERATURE COEFFICIENT ± ppm/°C		
SA	0606	0.05 to 1	0.5	1, 2, 5	100		
SB	1212	0.05 to 1	2	1, 2, 5	100		
SC	2020	0.05 to 1	6	1, 2, 5	100		

CLIMATIC SPECIFICATIONS				
Operating temperature range	-55 °C to +125 °C			
Storage temperature range	-55 °C to +155 °C			

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			

#### **DERATING CURVE**



TOLERANCE VS. OHMIC VALUE				
OHMIC VALUE RANGE $\Omega$	TOLERANCE ± %			
0.05 ≤ <i>R</i> < 1	5			
0.2 ≤ <i>R</i> < 1	2			
0.5 ≤ <i>R</i> < 1	1			

#### Note

· Higher values and higher tolerances on request

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Document Number: 53013

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**DIMENSIONS** in millimeters



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



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Revision: 01-Jan-2024