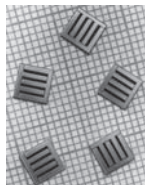




## Current Sensing Wirebondable Thin Film Chip Resistors



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

### 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
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

### 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.

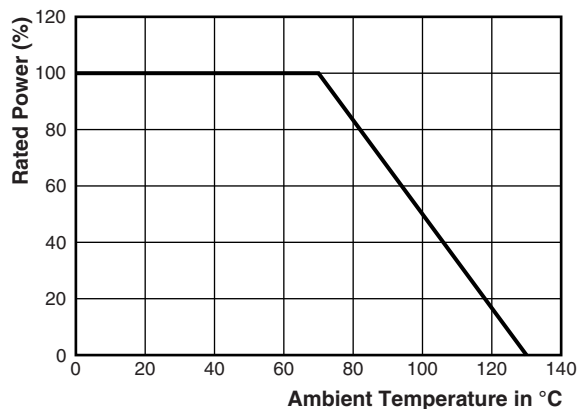
Gold pads are compatible with thermosonic or ultrasonic bonding of gold and aluminum wires.

STANDARD ELECTRICAL SPECIFICATIONS					
MODEL	SIZE	RESISTANCE RANGE $\Omega$	RATED POWER $P_{70\text{ }^\circ\text{C}}$ W	TOLERANCE $\pm$ %	TEMPERATURE COEFFICIENT $\pm$ 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



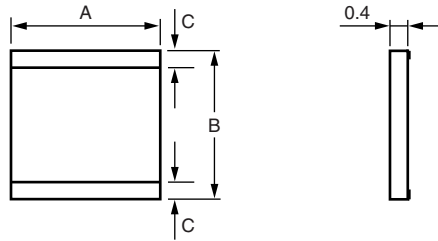
TOLERANCE VS. OHMIC VALUE	
OHMIC VALUE RANGE $\Omega$	TOLERANCE $\pm$ %
$0.05 \leq R < 1$	5
$0.2 \leq R < 1$	2
$0.5 \leq R < 1$	1

### Note

- Higher values and higher tolerances on request



**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

**GLOBAL PART NUMBER INFORMATION**

New Global Part Numbering: **SAKR588G0124**

<b>S</b>	<b>A</b>	<b>K</b>	<b>R</b>	<b>5</b>	<b>8</b>	<b>8</b>	<b>G</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>4</b>
GLOBAL MODEL		TCR		VALUE			TOLERANCE				OPTION
SA SB SC		K = ± 100 ppm/°C		R = decimal			F = ± 1 % G = ± 2 % J = ± 5 %				Leave blank if no option

Historical Part Number example: **S\*A 100 U588 G R0124 E4**

<b>S*A</b>	<b>100</b>	<b>U588</b>	<b>G</b>	<b>R0124</b>	<b>e4</b>
GLOBAL MODEL	TCR	VALUE	TOLERANCE	OPTION	RoHS
SA SB SC	K = ± 100 ppm/°C	R or U = decimal	F = ± 1 % G = ± 2 % J = ± 5 %	Leave blank if no option	



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