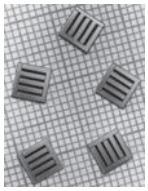
VISHAY

www.vishay.com

SA, SB, SC

Vishay Sfernice

Current Sensing Wirebondable Thin Film Chip Resistors



FEATURES

- Low ohmic value down to 0.05 Ω
- 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

Pb-free
RoHS COMPLIANT
HALOGEN FREE GREEN (5-2008)

LINKS TO ADDITIONAL RESOURCES

3D Models

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 Ω	RATED POWER $P_{70\,°C}$ 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

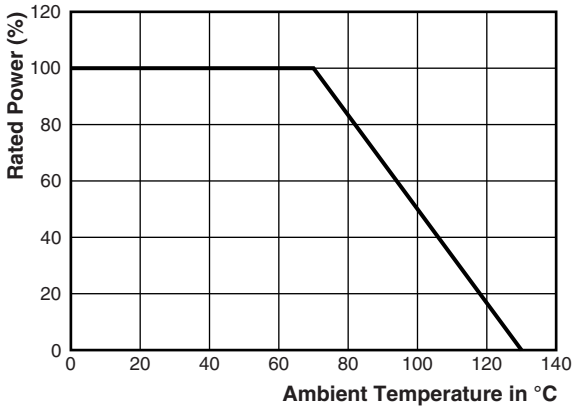
CLIMATIC SPECIFICATIONS

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_2O_5
Bonding pads	Gold
Backside metallization	On request Ni Au

DERATING CURVE



TOLERANCE VS. OHMIC VALUE

OHMIC VALUE RANGE Ω	TOLERANCE ± %
$0.05 \le R < 1$	5
$0.2 \le R < 1$	2
$0.5 \le R < 1$	1

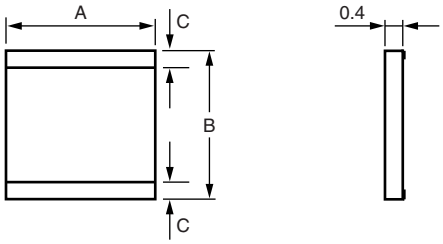
Note

- Higher values and higher tolerances on request

For technical questions, contact: sferthinfilm@vishay.com

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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

S	A	K	R	5	8	8	G	0	1	2	4

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

S*A	100	U588	G	R0124	e4
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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