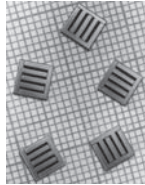


Current Sensing Wirebondable Thin Film Chip Resistors



DESIGN SUPPORT TOOLS

[click logo to get started](#)


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
- Low noise < -35 dB
- Low TCR 100 ppm/°C
- Wirebondable
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	RESISTANCE RANGE Ω	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

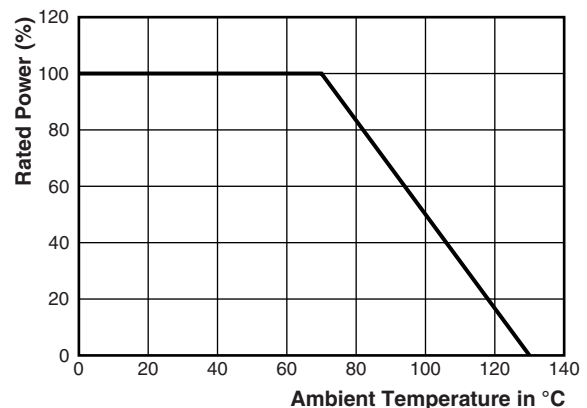
CLIMATIC SPECIFICATIONS

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 ₂ O ₅
Bonding pads	Gold
Backside metallization	On request Ni Au

DERATING CURVE



TOLERANCE VS. OHMIC VALUE

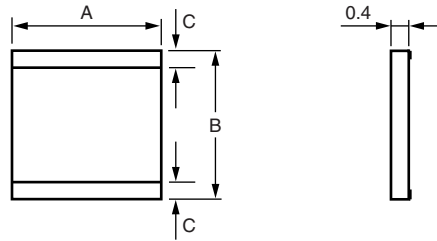
OHMIC VALUE RANGE Ω	TOLERANCE \pm %
$0.05 \leq R < 1$	5
$0.2 \leq R < 1$	2
$0.5 \leq R < 1$	1

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**

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	



Disclaimer

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