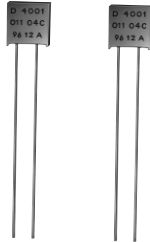
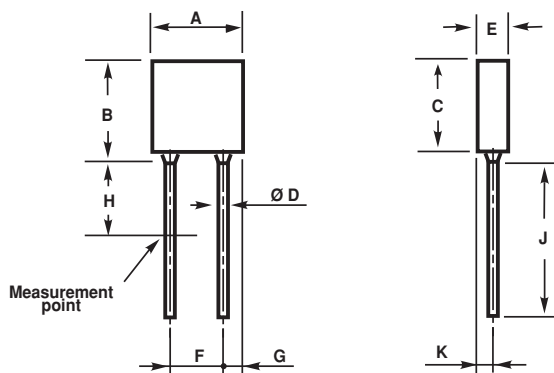


## Very High Precision, Very High Stability, High Reliability Resistors, Bulk Metal® Foil



Due to the unique performance of the Bulk Metal® Foil resistive elements, these resistors are very well adapted to high reliability applications.

### DIMENSIONS in millimeters



### FEATURES

Four variants are available, two reliability levels are proposed:

- Level B for serialized components
- Level C without serialization
- ESA/SCC 4001

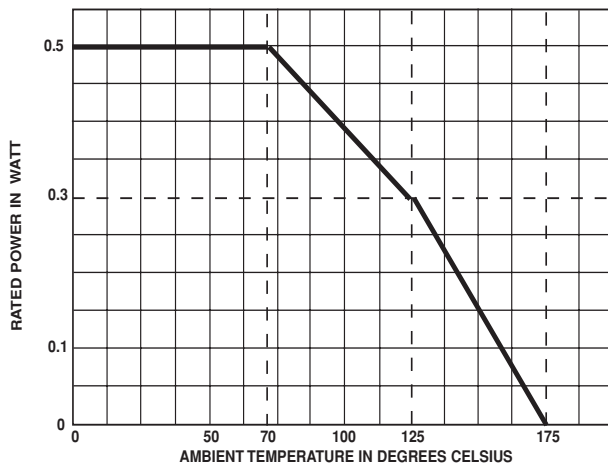
DIM.	SERIES	RCK HR 02	
	VARIANTS	DIM. IN mm	
		MIN.	MAX.
A	–	–	7.5
B	–	–	8
C	–	–	7.5
ØD	03 - 04 - 07 - 08	0.55	0.65
E	–	–	2.5
F	03 - 07	4.8	5.35
	04 - 08	3.55	4.1
G	03 - 07	1	1.5
	04 - 08	1.6	2.1
H	–	4	6
J	03 - 04	6	–
	07 - 08	20	–
K	–	–	1.5

ELECTRICAL SPECIFICATIONS	
VISHAY SERNICE DESIGNATION	RCK HR
Qualified Designation	RNC 90
ESA Specification	4001/011
Power Rating at + 70°C	0.5W
Limiting Element Voltage	300V
Temperature Coefficient	± 5ppm/°C (– 55°C + 125°C) ± 10ppm/°C θ>+ 125°C
Ohmic Value Range	33Ω to 100kΩ
Tolerance	± 0.02% to ± 1%
Temperature Limits	– 55°C to + 175°C
Dielectric Voltage	425VRMS
Soldering Temperature	260°C, immersion 10 s at a distance of no less than 1.6mm from the device body



PERFORMANCE				
TESTS	CONDITIONS	REQUIREMENTS		TYPICAL VALUES AND DRIFTS
		ESA / SCC 4001/11	MIL-R-55182E	
Short Time Overload	$U = \sqrt{2 \cdot R_n} / 5s$ U max. < 450V	± 0.05%	± 0.05%	± 0.002%
Rapid Temperature Change	- 55°C/+ 175°C 5 cycles CEI 66-2-14 Test Na	± 0.05%	± 0.05%	± 0.002%
Terminal Strength	CEI 68-2-21 Test Ua, Test U21 (Tensile)	± 0.02%	± 0.02%	± 0.001%
Soldering (Thermal Shock)	260°C / 10 s CEI 68-2-20 A Test Tb (met.1A)	± 0.02%	± 0.02%	± 0.002%
Vibration	10Hz to 2000Hz 1.5mm or 20 g 6 hours (met. B4) CEI 68-2-6 Test Fc	± 0.02%	± 0.02%	± 0.002%
Humidity (Steady State)	56 days 95% H.R. 40°C CEI 68-2-3	NA	± 0.05% Insulation resistance > 10 <sup>2</sup> MΩ	± 0.003% Insulation resistance > 10 <sup>4</sup> MΩ
Climatic Sequence	CEI 67-2-1 / CEI 68-2-2 CEI 67-2-13 / CEI 68-2-30	± 0.05%	± 0.05%	± 0.003% Insulation resistance > 10 <sup>4</sup> MΩ
Load Life	1000 hours Pn at + 70°C 90' / 30' cycle	± 0.05%	–	± 0.005%
High Temperature Exposure	1000 hours at + 175°C CEI 68-2-20A Test B	± 0.05%	± 0.05%	± 0.01%

## POWER RATING CHART



## PACKAGING

Resistors are packed in sealed blisters, up to 10 resistors per blister pack.  
The following information is printed on the blister pack:

- order reference
- date code
- ESA specification reference
- quality level
- review number.

## MARKING

Ohmic value is printed on the top side, 3 to 6 digits are used, R stands for ohm and K for kilo ohm.  
The front side is printed as follows:

- tolerance (letter code)
- ESA specification reference
- quality level
- variant
- manufacturing date (2 digits for the year, 2 digits for the week)
- a letter to differentiate manufacturing sequence.

ESA logo and serialization number are printed on the back side.

TOLERANCE CODE								
Tolerance ±%	0.005	0.01	0.02	0.05	0.1	0.2	0.5	1
Code SCC	E	L	P	W	B	C	D	F

## ORDERING INFORMATION

RCK HR MODEL	02 VERSION	10kΩ OHMIC VALUE	± 1% TOLERANCE		B1 QUALITY LEVEL	
	02		± 0.005%	± 0.1%	B1	C1
	02A		± 0.01%	± 0.2%	B2	C2
			± 0.02%	± 0.5%	B3	C3
			± 0.05%	± 1%		