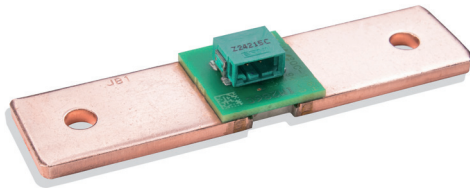




ISA-WELD® // PRECISION RESISTORS



BAC // SIZE 8420 (METRIC)



Features

- Up to 15 W permanent power
- Continuous current load up to 550 A (0.05 mOhm)
- High pulse power rating
- Max. fastening torque 10 Nm
- Shunt available with untinned or Ni-plated terminals
- PC board with connector for voltage sensing



Applications

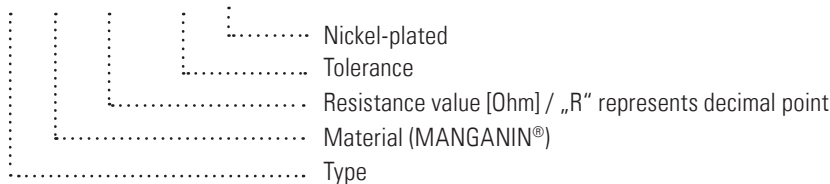
- Current sensor for EBM (Electronic Battery Management) in motorcars, trucks, forklifts, hybrid and electric vehicles
- Current sensing in bus bars
- Current sensing in welding equipments

Technical data

	mOhm	0.1	0.05
Resistance values			
Tolerance	%	5	5
Temperature coefficient (20-60 °C)	ppm/K	< 150	< 150
Applicable temperature range	°C	-10 to +125	-10 to +125
Power rating	W	10	15
Internal heat resistance (R _{thi})	K/W	2	1.3
Thermal EMV (0-60 °C)	µV/K	<1	<1
Inductance	nH	<3	<3
Stability (Nominal load) deviation after 2,000h T _K = Terminal temperature		<0.5 % (T _K = 105 °C)	<0.5 % (T _K = 105 °C)

Ordering code

BAC - M - R00005 - 5.0 - NI



Packaging information

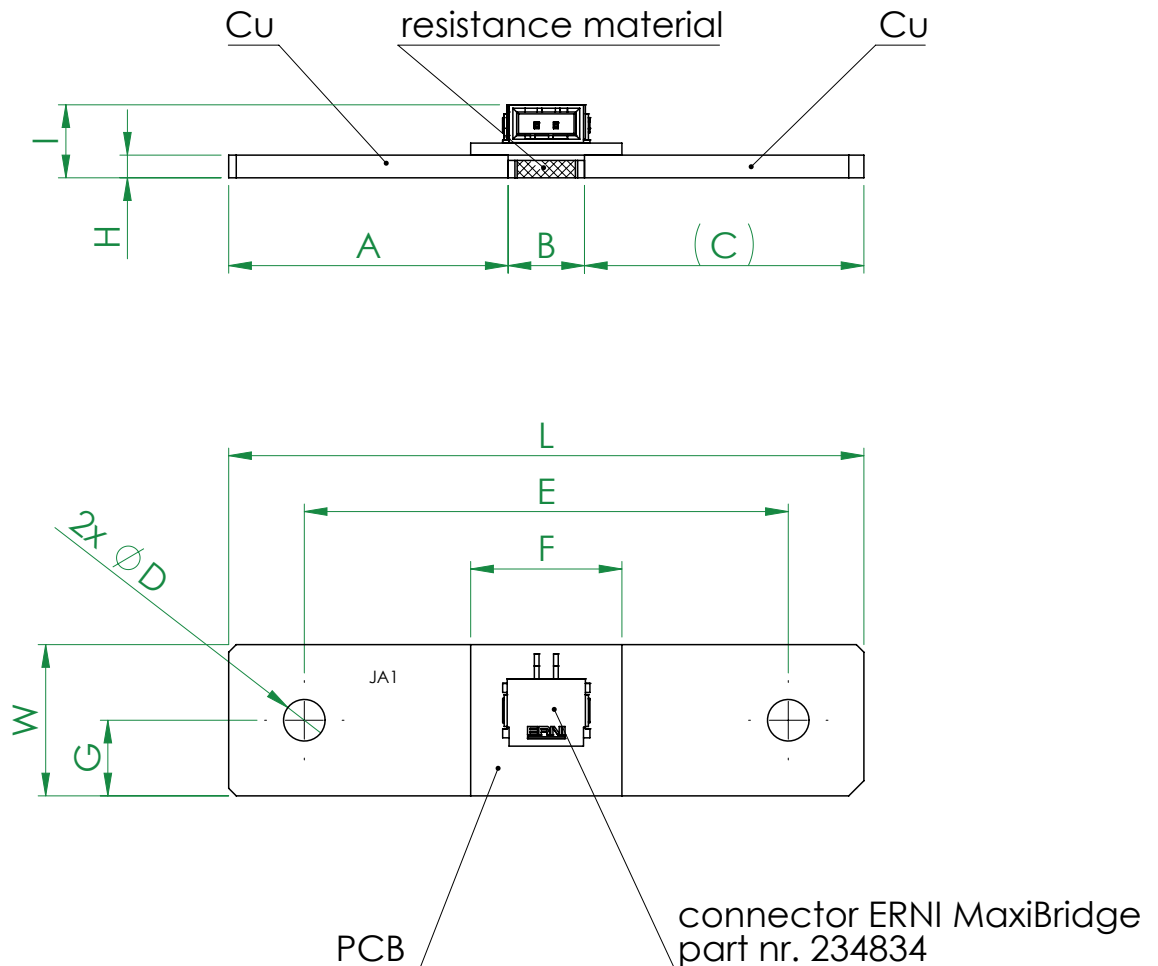
Delivery in plastic trays

30 pcs. per tray, 1,260 pcs. per batch



BAC // SIZE 8420 (METRIC)

Mechanical dimensions [mm] // Drawing no. Z-YK-415c



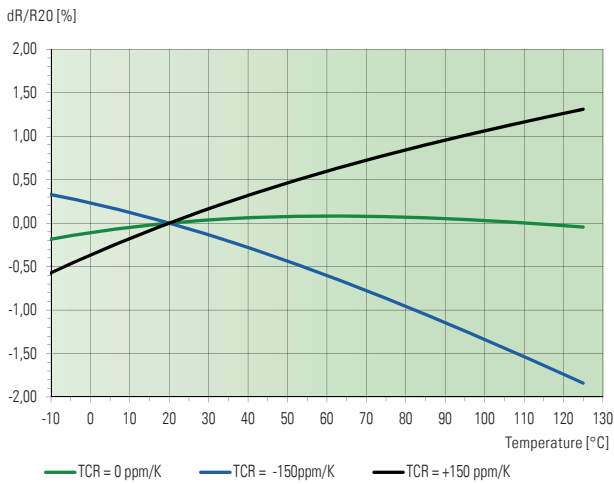
type	A	B	C	D	E	F
BAC-M-R0001-5.0	36.95 ±0.3	10.1 ±0.5	(36.95)	∅5.5 ±0.1	64 ±0.2	20 ±0.2
BAC-M-R00005-5.0	39.4 ±0.3	5.2 ±0.3	(39.4)	∅8.3 ±0.1	60 ±0.2	20 ±0.2
BAC-M-R00005-5.0-NI	39.4 ±0.3	5.2 ±0.3	(39.4)	∅8.3 ±0.1	60 ±0.2	20 ±0.2

type	G	H	I	W	L
BAC-M-R0001-5.0	10 ±0.2	3 ±0.1	9.65 ±0.5	20 ±0.2	84 ±0.2
BAC-M-R00005-5.0	10 ±0.2	3 ±0.1	9.65 ±0.5	20 ±0.2	84 ±0.2
BAC-M-R00005-5.0-NI	10 ±0.2	3 ±0.1	9.65 ±0.5	20 ±0.2	84 ±0.2

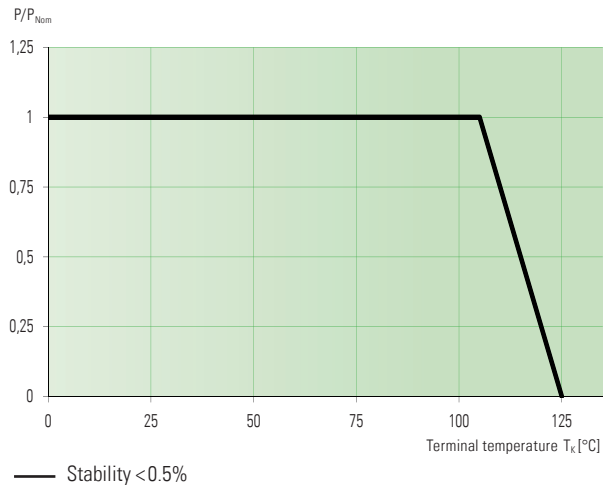


BAC // SIZE 8420 (METRIC)

Temperature dependence of the electrical resistance



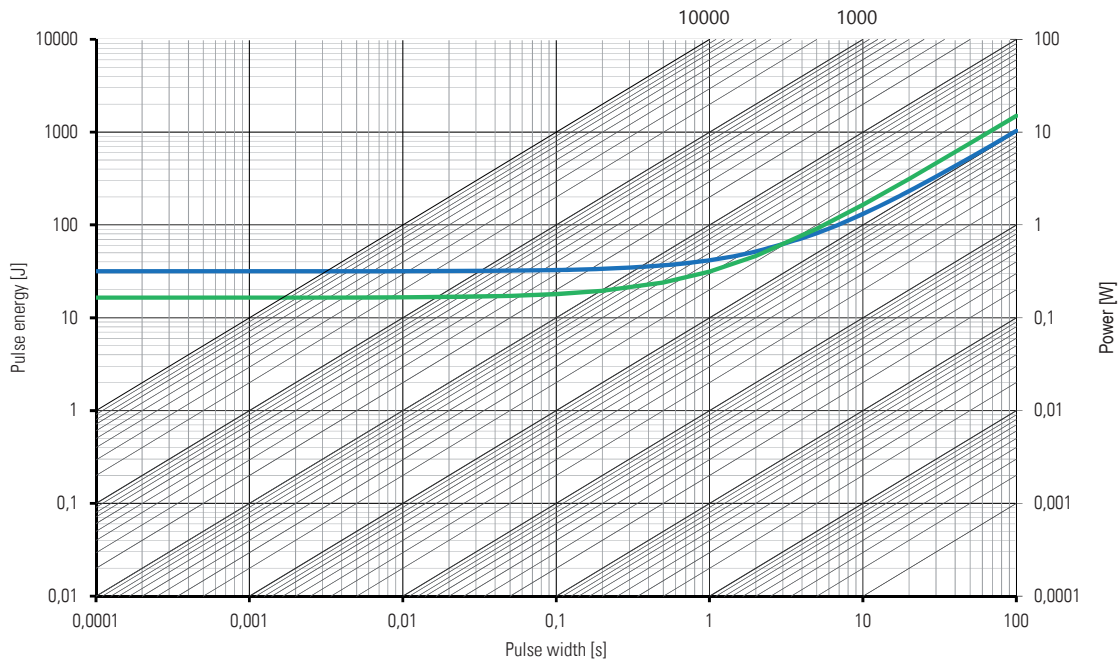
Power derating curve



Maximum pulse energy respectively pulse power for permanent operation

BAC-M-R0001, BAC-M-R0005

Maximum pulse energy / power continuous operation ($T_K = 105^{\circ}\text{C}$)



Disclaimer // All products, product specifications and data are subject to change without notice.

The product specifications do not expand or otherwise modify Isabellenhütte's terms and conditions of sale, including but not limited to, the warranty expressed therein. Isabellenhütte makes no warranty, representation or guarantee other than as set forth in its terms and conditions of sale. Information provided in datasheets and/or specifications may vary from actual results in different applications. Any statements made by Isabellenhütte regarding the suitability of products for certain types of applications are based on its knowledge of typical requirements that are often placed on its products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in the application intended.

No license, express or implied, or otherwise, to any intellectual property rights is granted by this document.

Any and all liability arising out of the application or use of any product shall be as set forth in Isabellenhütte's terms and conditions of sale.

