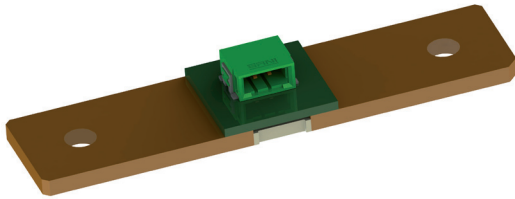




## ISA-WELD® // PRECISION RESISTORS



### BAC // SIZE 8420 (METRIC)



#### Features

- Up to 10 W permanent power
- Continuous current load up to 320 A (0.1 mOhm)
- High pulse power rating
- Max. fastening torque 10 Nm
- Shunt available with tinned or untinned terminals
- PC board with connector for voltage sensing



#### Applications

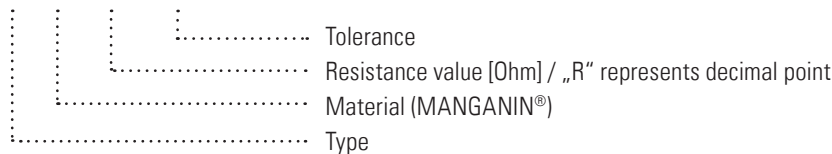
- Current sensor for EBM (Electronic Battery Management) in motorcars, trucks, forklifts, hybrid and electric vehicles
- Current sensing in bus bars
- Current sensing in welding equipments

#### Technical data

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

#### Ordering code

BAC - M - R0001 - 5.0



#### Packaging information

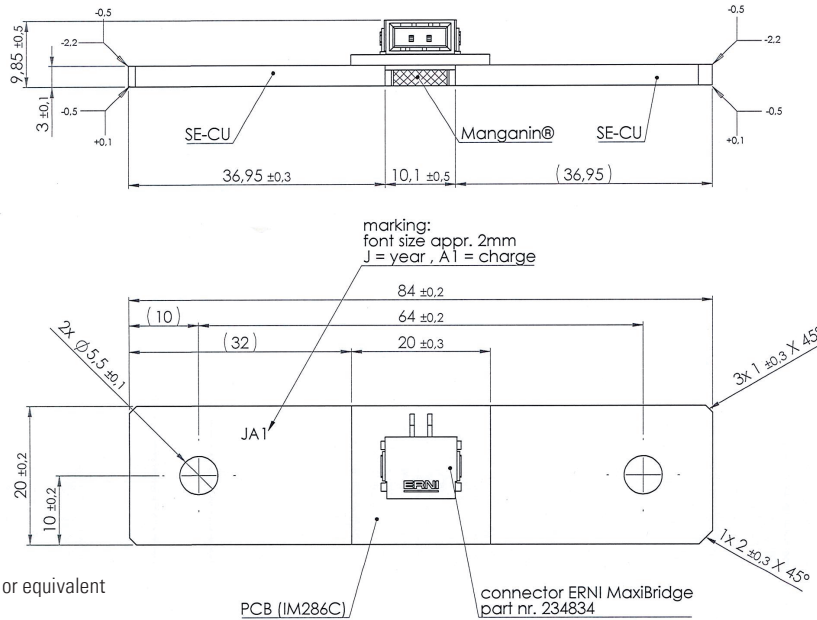
Delivery in cardboard trays

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



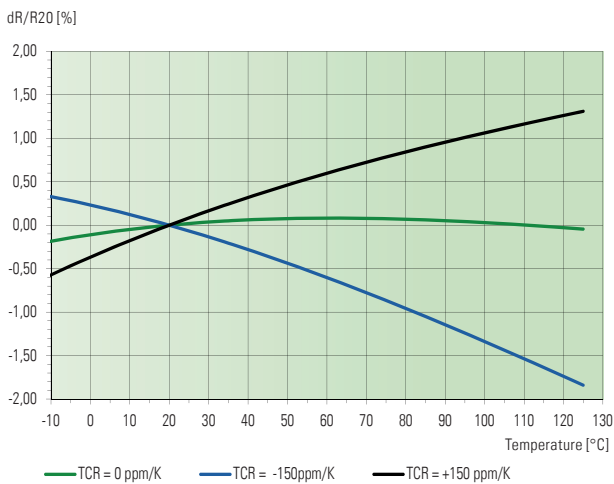
BAC // SIZE 8420 (METRIC)

Mechanical dimensions [mm] // Drawing no. Z-YJ-271

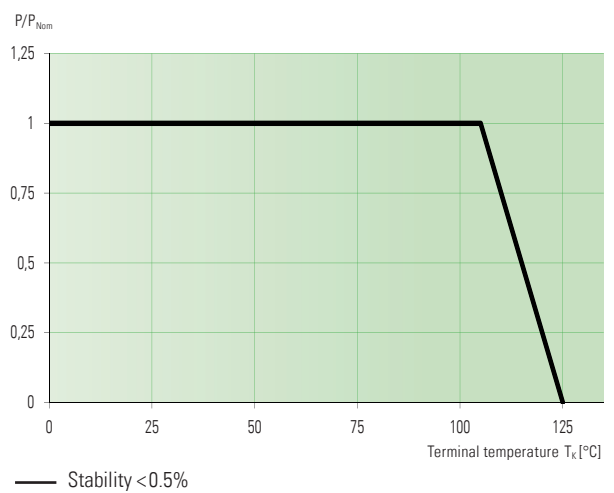


Material PCB: ISOLA DE104 or equivalent  
(IPC-4101/21)  
Flitter <math>< 600 \mu\text{m}</math>

Temperature dependence of the electrical resistance



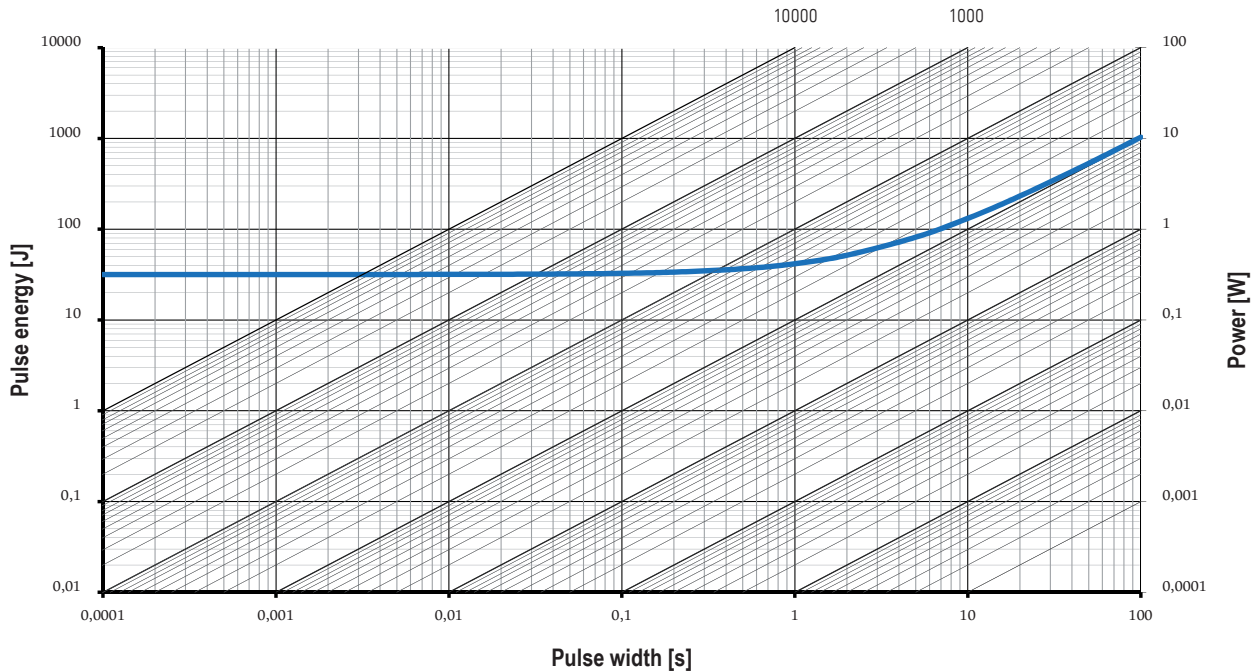
Power derating curve





BAC // SIZE 8420 (METRIC)

Maximum pulse energy respectively pulse power for permanent operation



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