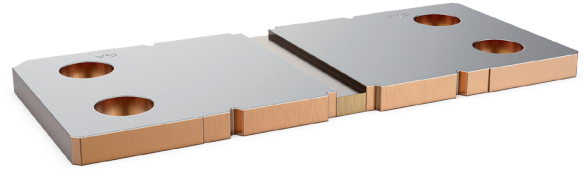


BAX (8436 metric)

ISA-WELD® PRECISION RESISTOR



FEATURES

- Up to 40 W permanent power
- Continuous current load up to 1,400 A
- High pulse power rating
- Available with nickel-tin-plating
- AEC-Q200 qualification for automotive version
- Shunt with tinned terminals



APPLICATIONS

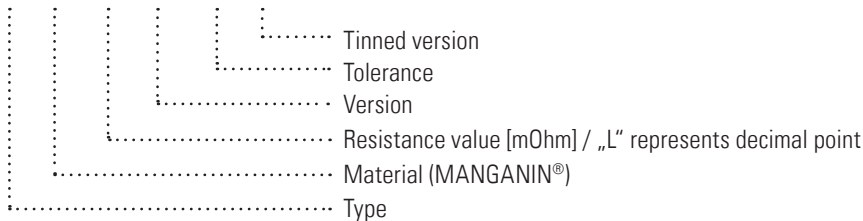
- Current sensor for EBM (Electronic Battery Management) in motorcars, trucks, forklifts, hybrid and electric vehicles
- Current sensing in bus bars
- Current sensing in welding equipments
- Industrial version available*

Technical data

Resistance values	μOhm	20 / 25
Tolerance	%	5
Temperature coefficient (20-60 °C)	ppm/K	50 ± 50
Applicable temperature range	°C	-40 to +170
Power rating (nominal load, P_{nom})	W	40 (20 μΩ) / 35 (25 μΩ)
Internal heat resistance (R_{thi})	K/W	0.75 (20 μΩ) / 0.85 (25 μΩ)
Thermal EMF (30-60 °C)	μV/K	0.6 (MANGANIN®)
Maximum resistance drift at nominal load after 2,000h of continuous operation at maximum temperature T_{max}	%	< 0.5 ($T_{max} = 140 °C$) < 1.0 ($T_{max} = 170 °C$)

Ordering code example, automotive version

BAX - M - L020 - V02 - 5.0 - SN

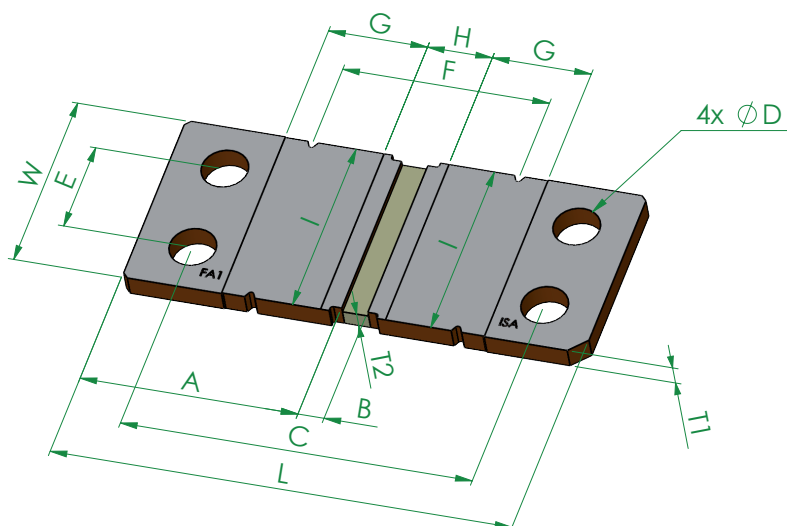


Packaging Information

64 pcs. per tube.

BAX // SIZE 8436 (METRIC)

Mechanical specification [mm]



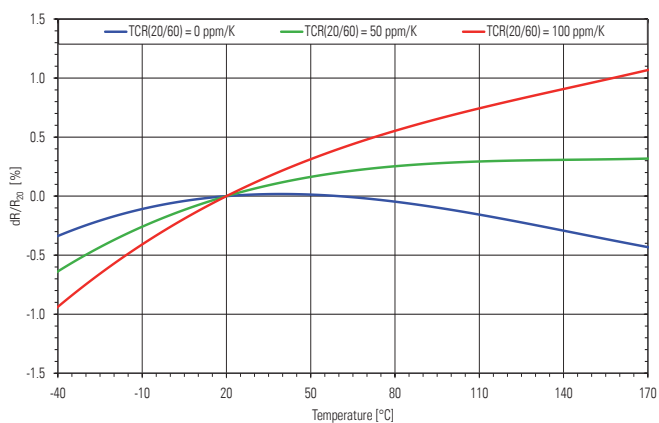
Type / Ordering code	A	B	C	D	E	F	G
BAX-M	39.625 ± 0.3	4.75 ± 0.3	64 ± 0.2	∅ 8.3 ± 0.15	18 ± 0.15	37.6 ± 0.2	18 ± 0.2

Type / Ordering code	H	I	L	T1	T2	W
BAX-M	11.8 ± 0.2	35.7 ± 0.1	84 ± 0.2	4 ± 0.05	3 ± 0.2	36 ± 0.2

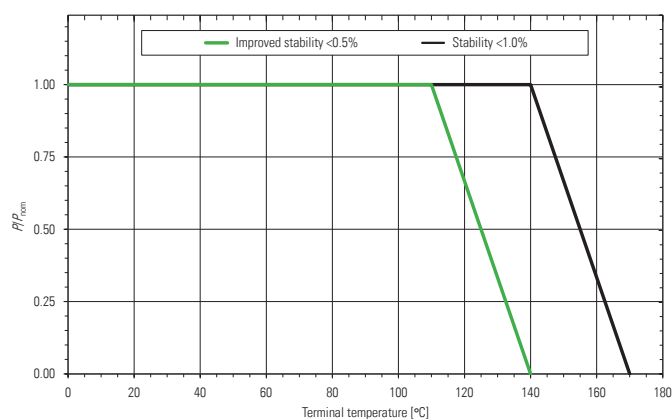
Electrical specification

Type	Value [$\mu\Omega$]	R_{thi} [K/W]	TCR [ppm/K]	$P_{140^\circ C}$ [W]	Note
BAX-M-L020-V02-5.0-SN	20	0.75	50 ± 50	40	
BAX-M-L025-V02-5.0-SN	25	0.85	50 ± 50	35	
BAX-M-L020-01-5.0*	20	0.75	50 ± 50	40	industrial version, untinned

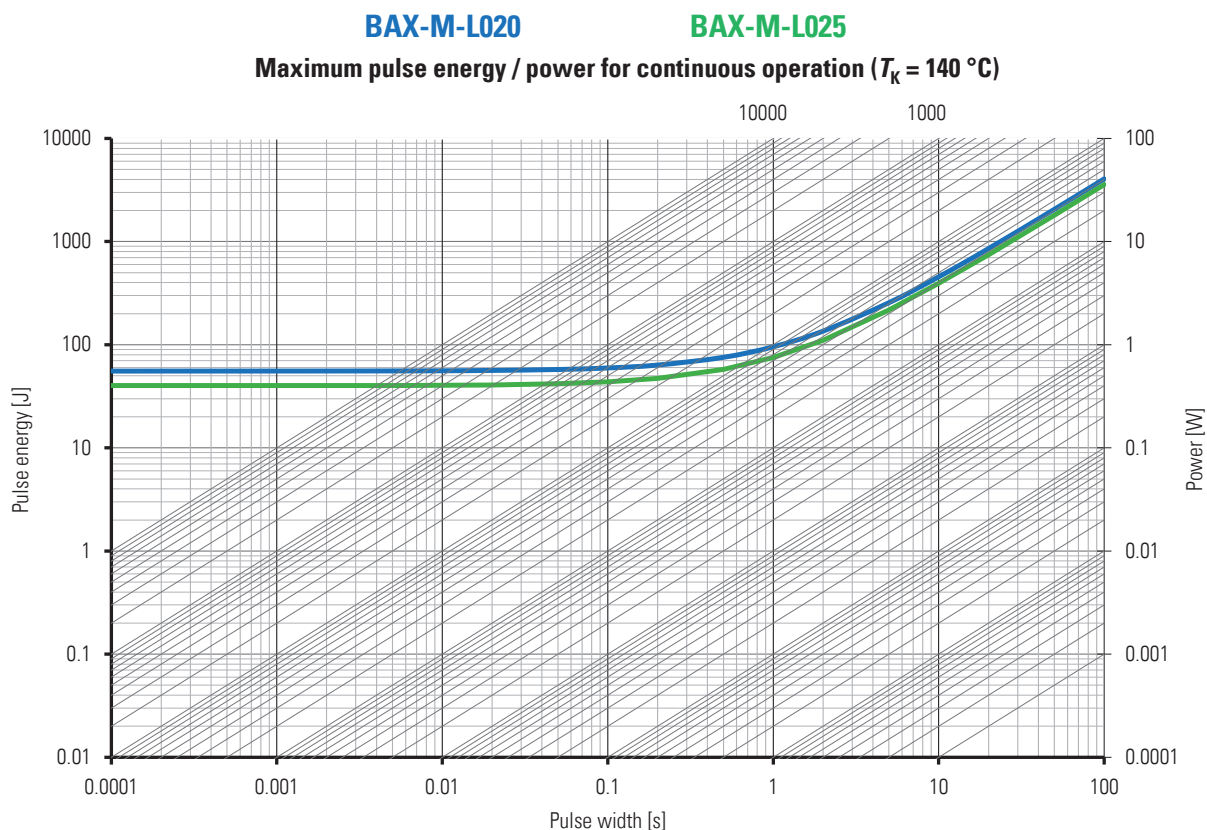
Resistance change with temperature, MANGANIN®



Power derating curve



Maximum pulse energy respectively pulse power for permanent operation



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