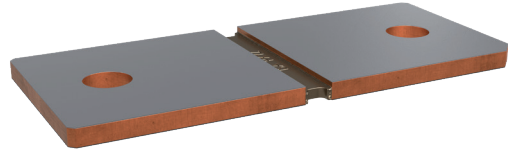


BAN (8436 metric)

ISA-WELD® PRECISION RESISTOR



FEATURES

- Up to 36 W permanent power (25 $\mu\Omega$)
- Continuous current load up to 1200 A (25 $\mu\Omega$)
- High pulse power rating
- Available with nickel-tin-plating
- AEC-Q200 qualified
- Shunt with tinned terminals



APPLICATIONS

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

Technical data

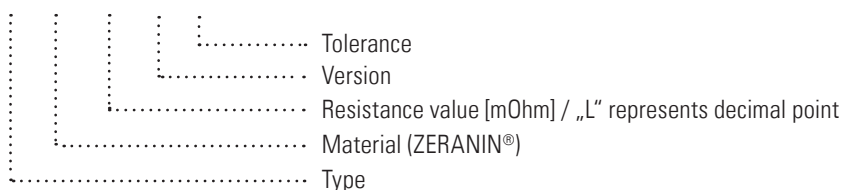
Resistance values	$\mu\Omega$	25
Resistance tolerance (manufactured)	%	5
Temperature coefficient (20-60 °C)*	ppm/K	$0 \pm 20^{**}$
Applicable temperature range	°C	-40 to +170
Power rating (nominal load, P_{nom})	W	up to 36
Internal heat resistance (R_{thi})	K/W	0.8
Thermal EMF	$\mu V/K$	<1 (ZERANIN®30)
Maximum resistance drift at P_{nom} after 2,000 h of continuous operation at maximum temperature T_{max}	%	<0.5 ($T_{max} = 140^\circ C$) <1.0 ($T_{max} = 170^\circ C$)

*The temperature coefficient is given for the temperature range from 20 to 60 °C, as the R(T) curve corresponds to a non-linear function.

**See table Electrical Specification on page 3.

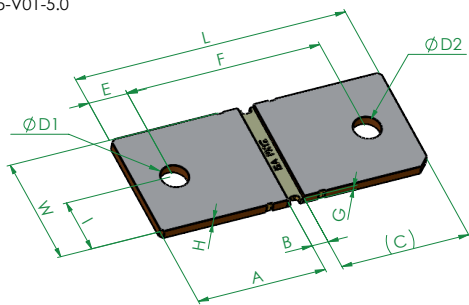
Ordering code example

BAN - Z - L025 - V01- 5.0

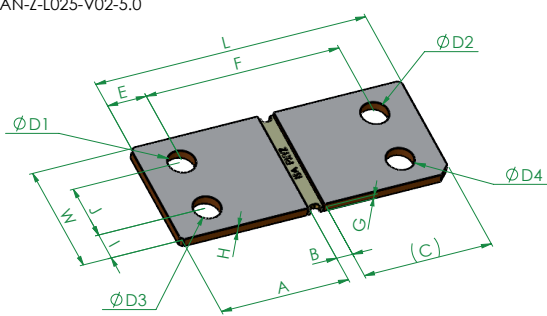


Mechanical dimensions [mm] // Z-YP-473d

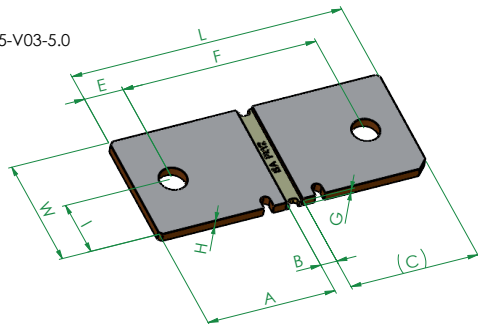
BAN-Z-L025-V01-5.0



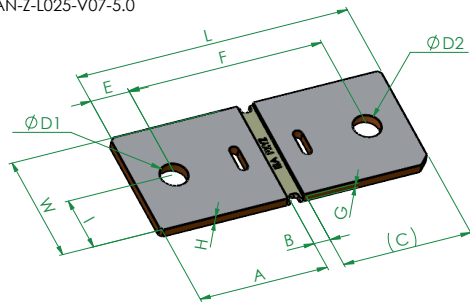
BAN-Z-L025-V02-5.0



BAN-Z-L025-V03-5.0



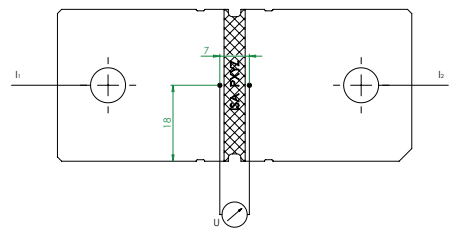
BAN-Z-L025-V07-5.0



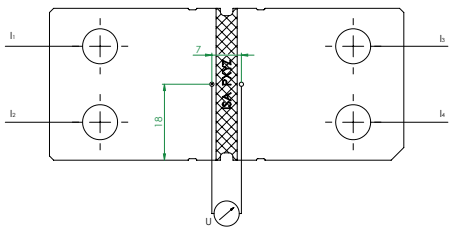
type	A	B	C	D1	D2	D3	D4	E	F	G	H	I	J	L	W
BAN-Z-L025-V01-5.0	39,5	5	39,5	8,3	8,3			12	60	1,8	3	18		84	36
BAN-Z-L025-V02-5.0	39,5	5	39,5	8,3	8,3	8,3	8,3	12	60	1,8	3	9	18	84	36
BAN-Z-L025-V03-5.0	39,5	5	39,5	8,3	8,3			12	60	1,8	3	18		84	36
BAN-Z-L025-V07-5.0	39,5	5	39,5	8,3	8,3			12	60	1,8	3	18		84	36

Connection diagram

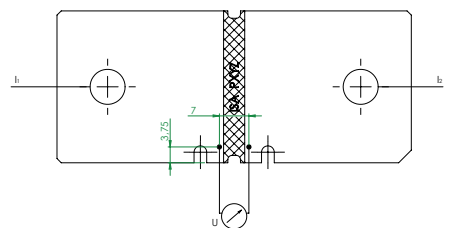
BAN-Z-L025-V01-5.0



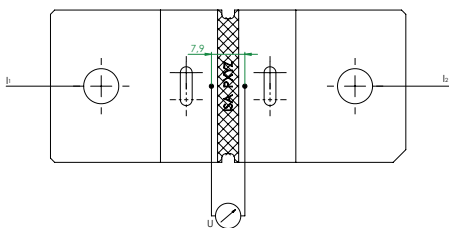
BAN-Z-L025-V02-5.0



BAN-Z-L025-V03-5.0



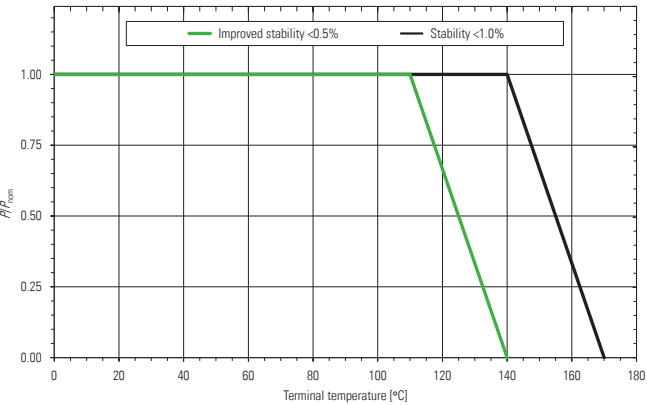
BAN-Z-L025-V07-5.0



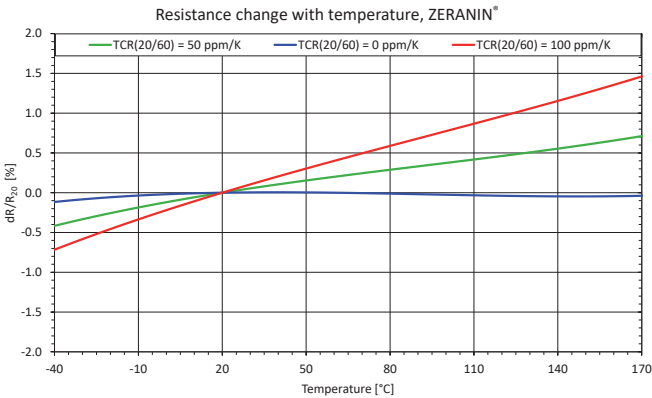
Electrical specification

Type	Value [μOhm]	R_{thi} [K/W]	TCR [ppm/K]	$P_{140^\circ\text{C}}$ [W]	Note
BAN-Z-L025-V01-5.0	25	0.8	50 ± 50	36	C-samples available
BAN-Z-L025-V02-5.0					
BAN-Z-L025-V03-5.0	25	0.8	0 ± 50	36	C-samples available
BAN-Z-L025-V07-5.0	25	0.8	0 ± 20	36	B-samples available

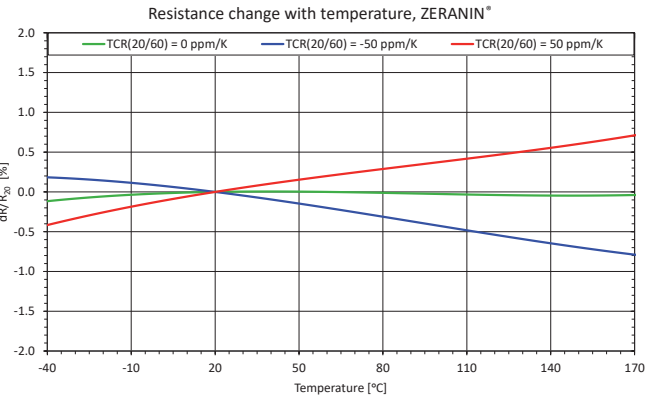
Power derating curve



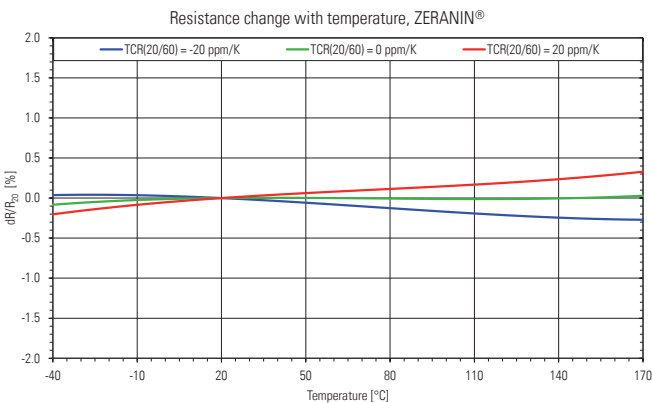
Temperature dependence of the electrical resistance
Type V01 // V02



Temperature dependence of the electrical resistance
Type V03



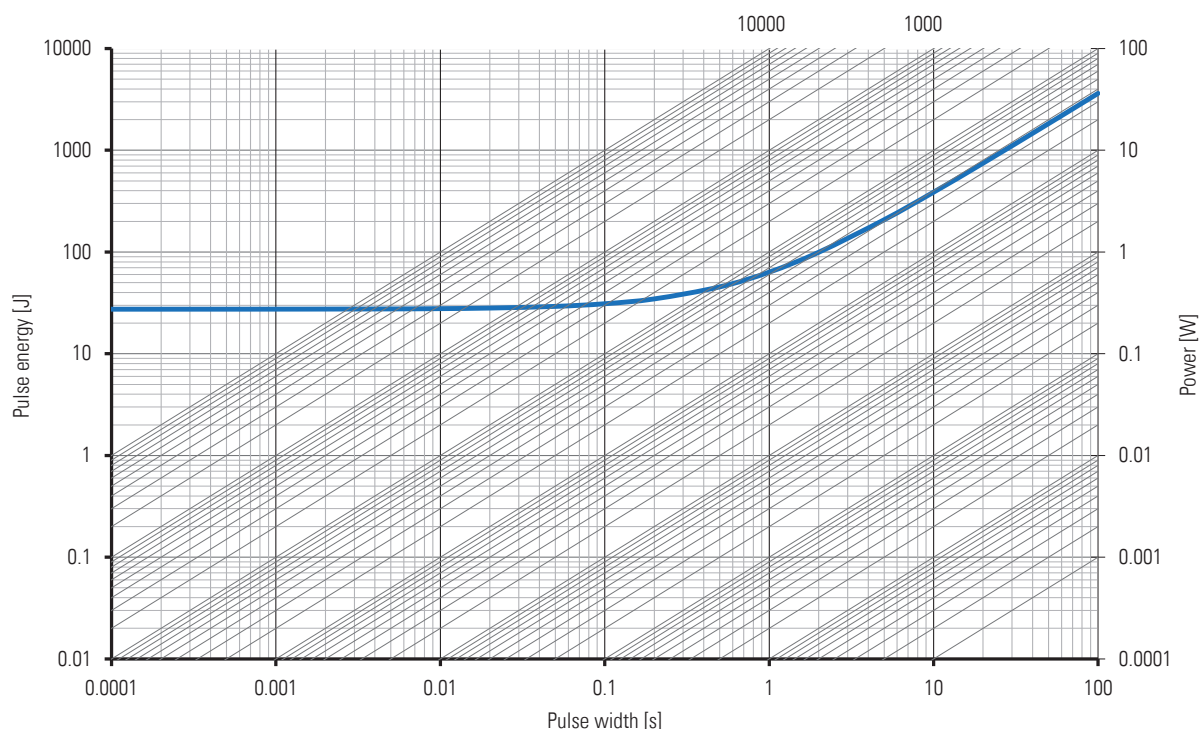
Temperature dependence of the electrical resistance
Type V07



Maximum pulse energy respectively pulse power for permanent operation

BAN-Z-L025

Maximum pulse energy / power for continuous operation ($T_K = 140^\circ\text{C}$)



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