

## Axial Cemented, Fusible, Wirewound Resistors



### FEATURES

- Can operate as both a normal resistor and as a fuse .
- Fuses when overloaded by more than 100 times the rated power
- Ceramic core
- Non flammable cement coating
- Mainly designed to customer requirements

### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING $P_{40^{\circ}\text{C}}$ W (max)	STANDARD TOLERANCE (max) $\pm$ %	NOMINAL RESISTANCE <sup>1)</sup> (typical) $\Omega$	TEMPERATURE COEFFICIENT (typical) ppm/ $^{\circ}\text{C}$	MAXIMUM PEAK ENERGY <sup>2)</sup> Ws (max)	MAXIMUM PEAK POWER <sup>2)</sup> W (max)	PERMISSIBLE $I^2 \times t$ VALUE <sup>3)</sup> @ 40 $^{\circ}\text{C}$ A <sup>2</sup> s (min)	FUSING $I^2 \times t$ VALUE <sup>3)</sup> @ 40 $^{\circ}\text{C}$ A <sup>2</sup> s (min)
Z302 BV 20088	3	10 5	15	100 to 180	1.07	1875	0.07	0.27

- Notes: <sup>1)</sup> Ambient temperature = 23 $^{\circ}\text{C}$   
<sup>2)</sup> Ambient temperature = 40 $^{\circ}\text{C}$   
<sup>3)</sup> Ambient temperature = 100 $^{\circ}\text{C}$

### CHARACTERISTICS OF FUSIBLE RESISTORS

Fusible resistors are capable of acting as both a regular resistor and as a fuse when abnormal current comes in. Since the two functions are performed by only one component the cost is lower.

The Z302 BV 20088 fuses when overloaded at more than 100 times the rated power. In line-powered devices, these fusible resistors can be used to act as a fuse when malfunction occurs and line voltage drops across the resistor.

To prevent flames or explosion when fusing, the device has an inflammable construction with high dielectric strength. After fusing the resistance value will be more than 100k ohm to realize sufficient circuit break. The components are mainly designed specifically to customer requirements.

### APPLICATIONS FOR FUSIBLE RESISTORS

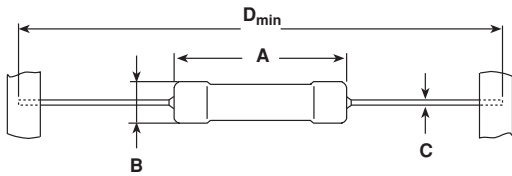
- POWER SUPPLIES
- ENERGY SAVING LAMPS
- BATTERY CHARGES

### ORDERING INFORMATION

Z302	15R	$\pm$ 5%	BV 20088
MODEL	RESISTANCE VALUE	TOLERANCE	PACKAGING
	$\Omega$	$\pm$ %	



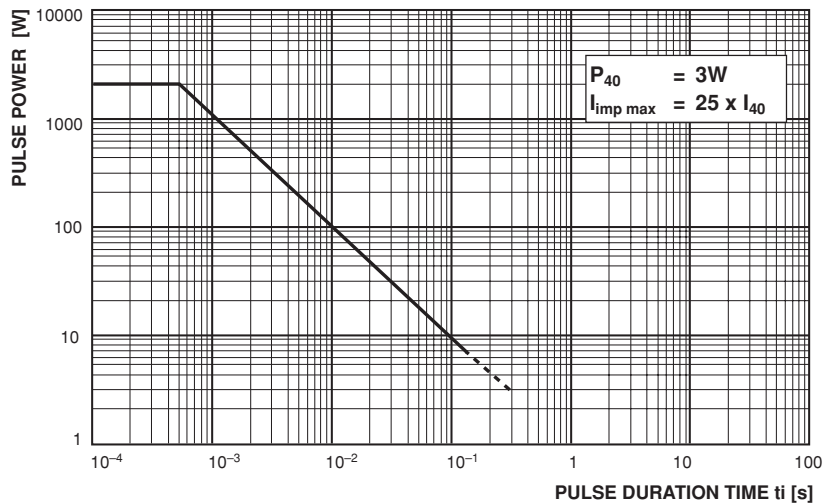
**DIMENSIONS**



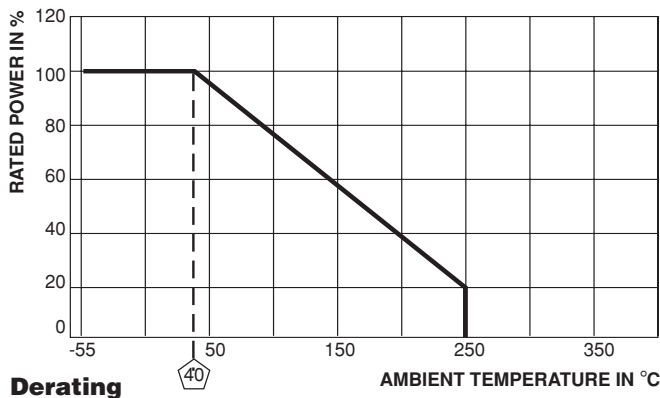
MODEL	DIMENSIONS in millimeters [inches]				
	A	B	C	D <sub>min</sub>	WEIGHT (g)
Z302 BV 20088	13 [0.512]	4.8 [0.189]	0.8 [0.31]	53±1 [2.087 ±0.039]	0.8 Typical

**PERFORMANCE**

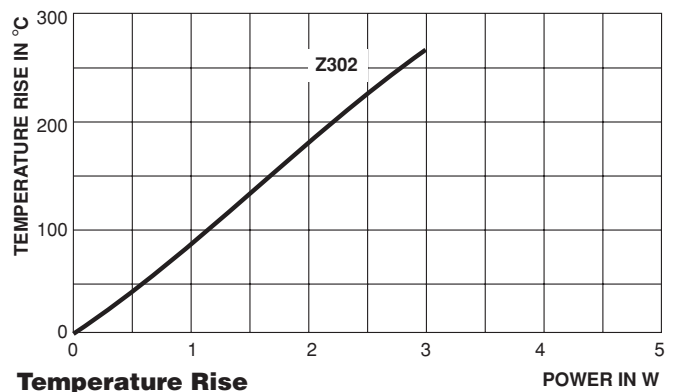
TEST	TEST RESULTS
Load Life, 12,000 hours	± 3 % ΔR
Vibration	± 1 % ΔR
Shock	± 1 % ΔR
Resistance to Solering Heat	± 1 % ΔR



**PULSE PERFORMANCE FOR SINGLE SQUARE PULSES @ 40°C**



**Derating**



**Temperature Rise**