

Fusible Wirewound Resistors

WA84F Series

- Predictable fusing characteristics
- Flameproof protection
- Suitable for pulse and fuse applications



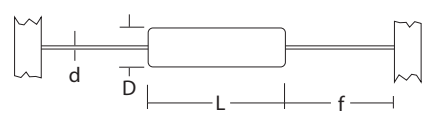
 All Pb-free parts comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

Electrical Data

		WA84F
Power rating at 25° C	watts	2.0
Power rating at 70° C	watts	1.6
Resistance range	ohms	0R2 to 30R
Limiting element voltage	volts	100
Isolation voltage	volts	350
TCR (-55° C to 155° C)	ppm/° C	≤1 Ω:350 >1 Ω:100
Resistance tolerance	%	5
Values		E24 preferred
Thermal impedance	° C/watt	90
Ambient temperature range	° C	- 55 to 155

Physical Data

Dimensions (mm) and Weight (g)							
Type	L max	D max	f min	d nom	PCB mounting centres	Min bend radius	Wt.nom
WA84F	14.5	5.2	23.6	0.8	20	1.2	1.1



Construction

A high purity ceramic substrate is assembled with interference fit end caps to which are welded the termination wires. The resistive element is wound on the substrate and welded to the caps. Cement protection is applied to the resistor body before marking with indelible ink.

Marking

Resistors are colour coded with five bands. Four of the bands are used to indicate value and tolerance, with IEC62 colours being used. A fifth yellow band denotes fusibility.

Solvent Resistance

The body protection and marking are resistant to all normal industrial cleaning solvents suitable for printed circuits.

Terminations

Material Solder-coated copper wire

Strength The terminations meet the requirements of IEC 68.2.21.

Solderability The terminations meet the requirements of IEC 115-1, Clause 4. 17. 3. 2.

Flammability

The resistor coating will not burn under any condition of applied temperature or component overload.

General Note

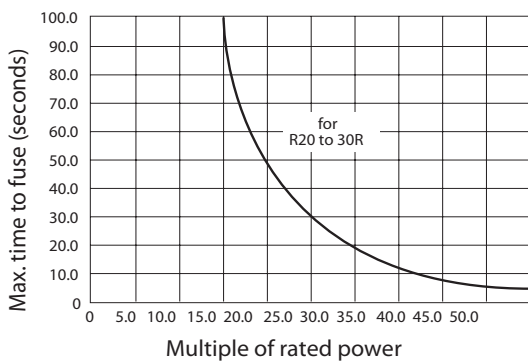
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WA84F Series

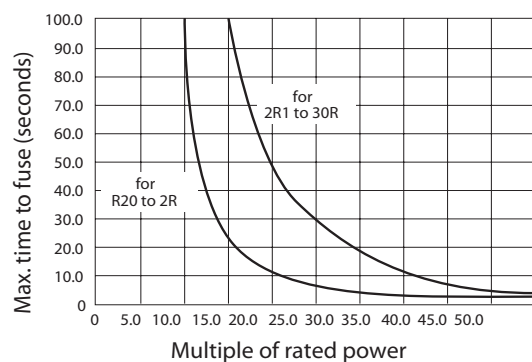
Performance Data

		Maximum	Typical
Load at rated power: 1000 hrs at 25 or 70°C	Δ R%	5.0	3.0
Dry heat: 1000 hrs at 200°C	Δ R%	5.0	3.0
Derating from rated power at 25°C		zero at 275°C	
Short term overload - 2.5 x rated power for 5 seconds	Δ R%	5.0	2.0
D.H.S.S.	Δ R%	5.0	2.0
Climatic	Δ R%	5.0	1.0
Pulse handling		Data available by request	

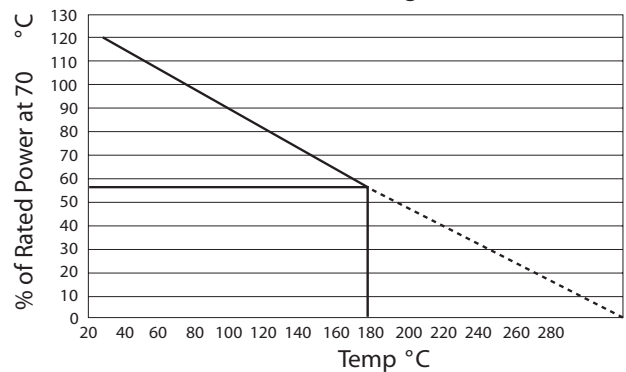
Fusing characteristics for constant voltage



Fusing characteristics for constant current



WA84F Series Derating Curve



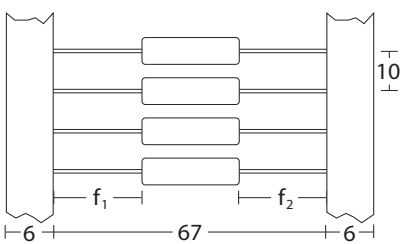
Packaging

The standard method of packaging is taped in ammo packs. Can be provided on reels by request.

The critical dimensions are shown in figure 2.

Component wires will not protrude beyond the outside edge of the tapes.

Figure 2



Body Location $f_1 - f_2 \leq 1.4 \text{ mm}$

Ordering Procedure

Example: **WA84F-15RJI** (WA84F, 15 ohms $\pm 5\%$, Pb-free)



1	2	3	4
Type	Value	Tolerance	Packing & Termination Finish
WA84F	E24 = 3 characters R = ohms	J = $\pm 5\%$	I Ammo pack, Pb-free 1000/box

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