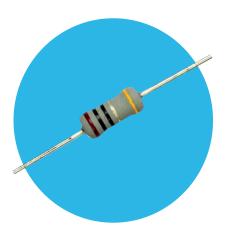
#### Resistors

# **Electronics**

#### **Fusible Wirewound Resistors**

#### **WA84F Series**

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





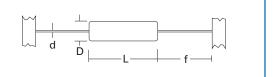
All Pb-free parts comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

## Flectrical Data

		WA84F
Power rating at 25°C	watts	2.0
Power rating at 70°C	watts	1.6
Resistance range	ohms	OR2 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)									
					PCB	Min			
					mounting	bend			
Туре	L max	D max	f min	d nom	centres	radius	Wt.nom		
WA84F	14.5	5.2	23.6	0.8	20.3	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

The terminations meet the requirements of Strength

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

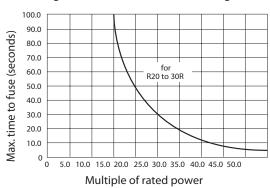
#### **WA84F Series**



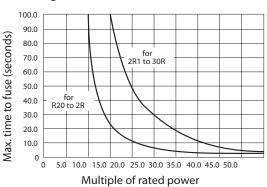
### Performance Data

		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.	∆ R%	5.0	2.0	
Climatic	Δ R%	5.0	1.0	
Pulse handling		Data available by request		

#### Fusing characteristics for constant voltage







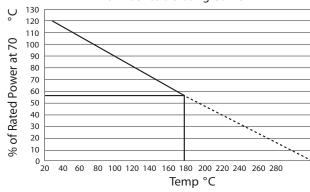
#### **Packaging**

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.

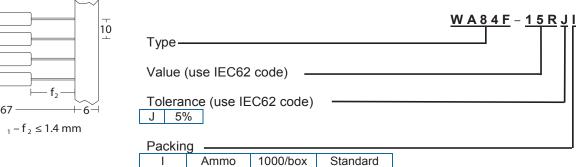
Component wires will not protrude beyond the outside edge of the tapes.

#### WA84F Series Derating Curve



#### **Ordering Procedure**

Example: WA84F at 15 ohms and 5% tolerance packed in a box of 1000 pieces



# Figure 2 $f_1 = f_2$ Body Location $f_1 - f_2 \le 1.4 \text{ mm}$

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

BI Technologies IRC Welwyn

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**Authorized Distributor** 

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