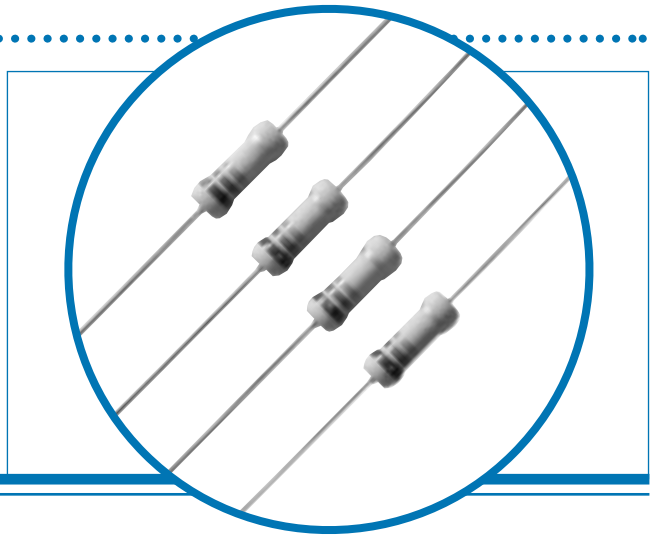
Flameproof Power Oxide Resistors

TT electronics
Welwyn Components

FA80 Series

- **Rugged metal oxide film**
- **Flameproof protection**
- **Low operating temperature**



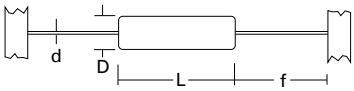
Electrical Data

		FA84
Power rating at 70°C	watts	2.0
Resistance range	ohms	16R - 100K
Limiting element voltage	volts	350
TCR	ppm/°C	500
Resistance tolerance	%	5, 10
Values		E24 preferred
Thermal impendance	°C/Watt	90
Ambient temperature range	°C	-55 to 155

Physical Data

Dimensions (mm) & Weight (g)

Type	L Max	D Max	f min	d nom	PCB mounting centres	Min. bend radius	Wt.nom
FA84	14.5	5.1	23.6	0.8	20.3	1.2	1.1



Construction
The resistance element is deposited on a high purity ceramic rod. End caps are force fitted and termination wires welded to the caps. The element is adjusted to the required resistance value by a helical cut; finally the cement protection is applied to the resistor body before marking with indelible ink.

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

Marking
Resistors are colour coded with 4 bands.

IEC 62 colours are used.

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

Flammability
The resistors will not burn or emit incandescent particles under any condition of applied temperature or power overload.

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

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Performance Data

		Maximum
Load at 35% rated power: 1000 hrs at 125°C	ΔR %	3
Shelf life: 12 months at room temperature	ΔR %	2
Derating from rated power at 70°C		Zero at 235°C
Climatic	ΔR %	1
Climatic category		40/125/56
Temperature rapid change	ΔR %	0.5
Resistance to solder heat	ΔR %	0.5

Packaging

All FA84 resistors are supplied tape packed ready for loading onto automatic sequencing and insertion machines.

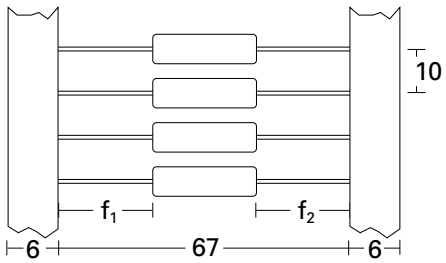
The standard taping method and critical dimensions are shown in Figure 1.

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

All taped resistors will be supplied either on reels or in ammopacks, depending upon ordered quantities.

Standard Quantities Per Package

Type	FA80
Reel	1000
Ammo pack	1000



Body Location $f_1 - f_2 \leq 1.4$ mm

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