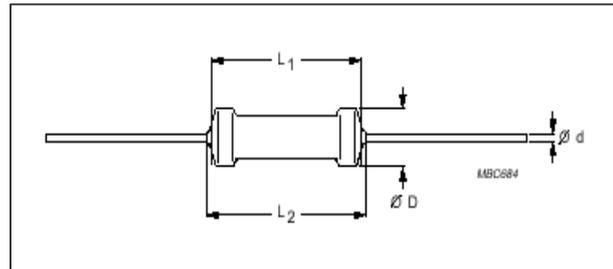


**Mili-ohm fusible resistors**

**PFR 1W**

**FEATURES**

- Over load protection without risk of fire
- Wide range of overload currents
- Low cost.



**APPLICATIONS**

- Audio, Video
- TV, Monitor
- Power supplies.

TYPE	Dimensions ( mm )			
	D ± 0.8	L 1 ± 0.8	L 2 Max.	d (±0.05)
PPFR-1W	2.7	6.5	7.5	0.55

**Description**

The resistors are coated by cu plating film on the high grade ceramic body. After a helical groove has been cut the resistive layer, tinned electrolytic Copper wires are welded to the end cap. The resistors are coated with a Silicone brown which provides electrical, mechanical climatic protection.

**QUICK REFERENCE DATA**

DESCRIPTION	VALUE
	PFR 1W
resistance range	10m Ω ~ 100m Ω
resistance tolerance	±10%, ±20%
temperature coefficient	±1500ppm / °C
rated dissipation at T <sub>amb</sub> = 70 °C	1W
max. working voltage	250V
climatic category ( IEC60068 )	-55 / 155 / 56
fusing characters	Rated power x 16, max.:2sec

**Mili-ohm fusible resistors**

**PFR 1W**

**ORDERING INFORMATION**

Ordering code indicating resistor types and packing

Table 1

Type	Bandolier width	Packing	Quantity	Resistance range	Tol. ± %	Ordering code
PFR-1W	52mm	ammo	1000	10m Ω	20	PPFR 100 90004
				40m Ω	20	PPFR 100 90001
				50m Ω	10	PPFR 100 90002
				100m Ω	10	PPFR 100 90003

The maximum permissible hot – spot temperature is 155 °C.

**DERATING**

The power that the resistor can dissipate depends on the operating temperature : Fig. 1

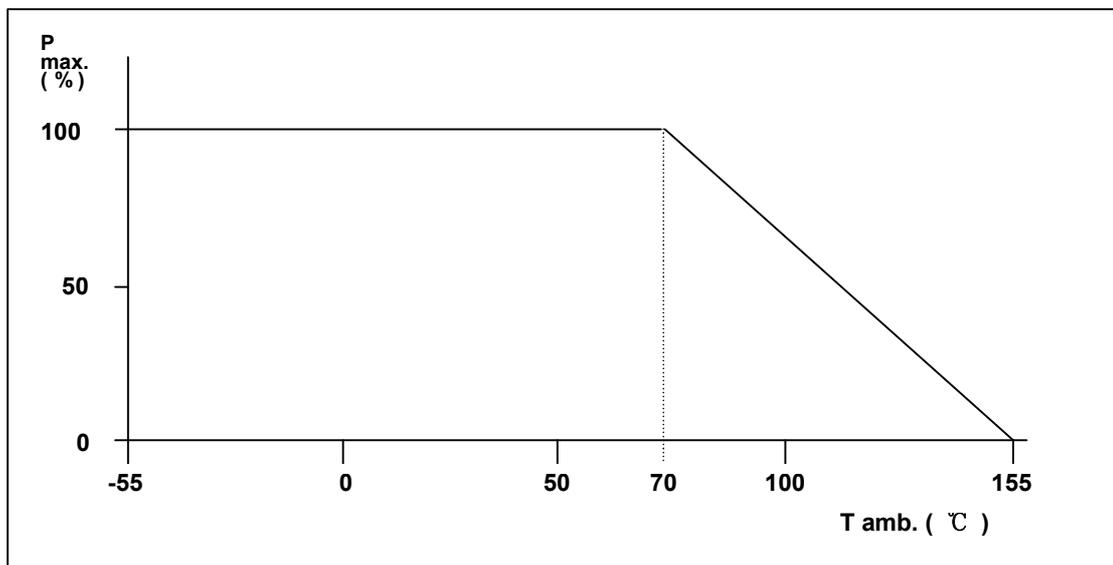


Fig. 1 Maximum dissipation (P<sub>max</sub>) in percentage of rated power as a function of the ambient Temperature (T<sub>amb</sub>.)

**Mili-ohm fusible resistors**

**PFR 1W**

**TEST AND REQUIREMENTS**

Table 2. Test procedures and requirements

TEST	PROCEDURE		REQUIREMENTS
			PFR 1W
robustness of terminations: tensile all samples	ϕ 0.55 mm: load 10N:10s		number of failures <math>10 \times 10^{-6}</math>
bending half number of samples	ϕ 0.55 mm: load 5N: 4x90°		number of failures <math>10 \times 10^{-6}</math>
torsion other half number samples	3x360°in opposite directions		no damage ±0.25% + 0.05 Ω
solderability	2 s ; 235 °C flux 600		good tinning; no damage
soldering heat	Thermal shock: 3 s; 360 °C 6mm from body		±2% +0.05Ω
rapid change of temperature	30 minutes at -55 °C and 30 minutes at +155 °C;5cycles		±5% +0.1Ω
damp heat	56 days; 40 °C; 90 to 95% RH dissipation 0.01 Pn		± 5% + 0.1Ω
endurance	1000 hours at 70 °C; Pn or V max.		± 5% + 0.1Ω
temperature coefficient	between -55 °C and +155 °C		± 1500 ppm / °C
dielectric withstanding voltage	500V (RMS): during 1min. V- block method		no breakdown
short time overload	rated voltage x 6.25 5 s on 45 s off ( v ≤2 x v max.) 5 cycles		±5% +0.1Ω
fusing time	resistance	current	Opening time
	10m Ω	20A	5sec ~ 15sec
	40m Ω	10A	
	50m Ω	8A	
	100m Ω	5A	

IT Characteristic Graph ( Average time Current Curve )

