

# MFP SERIES

- Small size for power rating
- Flameproof protection

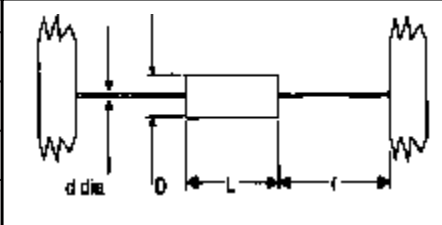
## ELECTRICAL DATA:

	MFP05	MFP1	MFP2
Power rating at 70°C watts	0.5	<1 ohm: 0.7>1 ohm:1.0	2
Resistance range watts	7R5 - 15R0	0.1 - 1M	1R0 - 1M
Limiting element voltage volts	350		
TCR ppm/°C	100	<1 ohm:300 1 ohm-9.1 ohm: 200 >10 ohm:100	100
Resistance Tolerance * %	1, 2, 5		
Standard Values	E24 preferred		
Thermal Impedance °C/watt	150	120	82
Ambient Temperature °C	-55 to 155		

\* Below 1 ohm 5% TOL preferred.

## PHYSICAL DATA:

Dimensions (mm) and Weight (g)							
Type	L max.	D max.	f min.	d nom.	PCB mounting centers	Min. bend radius	Wt. nom.
MFP05	3.5	1.8	22.4	0.5	7.6	0.5	0.1
MFP1	6.2	2.3	21.0	0.6	10.2	0.6	0.3
MFP2	10.0	4.0	19.0	0.8	18.4	1.2	0.55



## Construction:

The resistance element is a precisely controlled thin film of metal alloy on a high purity ceramic core, protected by a cement coating applied so that terminations remain completely clear. This permits a well-defined body length (clean lead to clean lead dimension "L").

## 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 color coded with 4 or 5 bands depending on value and tolerance. IEC colors are used.

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

**Flammability:** The resistor coating will not burn or emit incandescent particles under any condition of applied temperature or power overload.

**PERFORMANCE DATA:**

		Maximum
Load at rated power: 1000 hours at 70°C	ΔR%	5
Shelf Life: 12 months at room temperature	ΔR%	2
Derating from derated power at 70°C	ΔR%	Zero at 155°C
Climatic	ΔR%	3
Climatic category	ΔR%	50/155/56
Temperature rapid change	ΔR%	0.5
Resistance to solder heat	ΔR%	0.5
Voltage proof	ΔR%	500 min

**APPLICATION NOTES:**

1. If the resistors are to dissipate full rated power, it is recommended that the terminations should not be soldered closer than 4mm from the body.
2. Due to operating temperature limitations imposed by some pcb materials, derating may be necessary. An estimate of the temperature rise to be expected can be calculated using the thermal impedance figures given under Electrical Data.
3. MFP resistors can also be supplied pre-formed, contact factory for details.

**PACKAGING:**

MFP resistors are normally supplied tape packed ready for loading onto automatic sequencing and insertion machines.

The standard taping method and critical dimensions are shown below. 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 on quantities ordered. Pre-formed resistors are supplied loose packed in plastic bags or boxes. This product and packaging is denoted code F.

**STANDARD QUANTITIES PER PACKAGE:**

Type	Code	MFP05	MFP1	MFP2
Reel	R	5000	5000	2500
Ammopack A	A	5000	5000	2500

**HOW TO ORDER:**

Sample part number:

