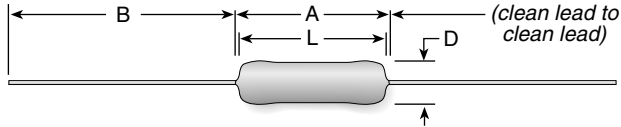




## Metal Alloy Film Resistors 5% Tolerance Available in E24 Ohmic Values



PowrFilm resistors offer a major advantage over comparable metal film, carbon composition and fiberglass core wire types: A high power-to-size ratio. The PF1 can dissipate 1.0 watt in a size comparable to a 0.25 watt resistor and 3 watts in a package smaller than a comparable 1 watt unit.

PowrFilm is a high quality resistor constructed with a metal film alloy deposited on a high grade ceramic body. A non-flammable coating provides for environmental and electrical protection.

PowrFilm resistors are

an excellent choice for large volume, cost-sensitive applications requiring a high quality resistor that approaches the initial accuracy and long term stability of wirewound resistors.

### FEATURES

- High power-to-size ratio.
- Economical.
- Endures continuous full loading with very little change in value over time.
- Excellent resistors where compact, space saving resistors are required.
- 24 Values per decade.
- RoHS compliant product available Jan. 2006 Add "E" suffix to part number to specify.

### SPECIFICATIONS

#### Material

**Coating:** Non-flammable lacquer.

**Core:** High grade ceramic.

**Terminals:** Solder-coated copper lead.

**Derating:** Linearly from 100% @ +70°C to 0% @ +155°C.

#### Electrical

**Tolerance:** ±5%.

**Temperature coefficient:** ±250 ppm/°C.

**Dielectric withstanding voltage:** 500 VAC

Series	Wattage	Ohms	Length	Dimensions (in. / mm)			Hot spot	Lead
				Diam.	Dim. A	Dim. B	max.	ga.
PF1	1	1.0-1M	0.256 / 6.5	0.100 / 2.5	0.315 / 8.0	1.1 / 27.9	350	205°C 22
PF2	2	1.0-1M	0.394 / 10	0.154 / 3.9	0.433 / 11	1.0 / 25.4	500	220°C 20
PF3	3	1.0-1M	0.657 / 17	0.205 / 5.2	0.704 / 18	1.5 / 38.1	750	250°C 20

### STANDARD PART NUMBERS FOR STANDARD RESISTANCE VALUES

Wattage				Wattage				Wattage				Wattage				Wattage								
Ohmic value	Part No. Prefix Suffix	1.0		2.0		3.0		Ohmic value	Part No. Prefix Suffix	1.0		2.0		3.0		Ohmic value	Part No. Prefix Suffix	1.0		2.0		3.0		
		PF1J	PF2J	PF3J	PF1J	PF2J	PF3J			Ohmic value	Part No. Prefix Suffix	PF1J	PF2J	PF3J	Ohmic value			Part No. Prefix Suffix	PF1J	PF2J	PF3J			
1	1R0	✓	✓	✓	18	18R	✓	✓	✓	350	350	✓	✓	✓	5,600	5K6	✓	✓	✓	110,000	110K	✓	✓	✓
1.1	1R1	✓	✓	✓	20	20R	✓	✓	✓	360	360	✓	✓	✓	6,200	6K2	✓	✓	✓	120,000	120K	✓	✓	✓
1.2	1R2	✓	✓	✓	22	22R	✓	✓	✓	390	390	✓	✓	✓	6,800	6K8	✓	✓	✓	130,000	130K	✓	✓	✓
1.3	1R3	✓	✓	✓	24	24R	✓	✓	✓	430	430	✓	✓	✓	7,500	7K5	✓	✓	✓	150,000	150K	✓	✓	✓
1.5	1R5	✓	✓	✓	27	27R	✓	✓	✓	470	470	✓	✓	✓	8,200	8K2	✓	✓	✓	160,000	160K	✓	✓	✓
1.6	1R6	✓	✓	✓	30	30R	✓	✓	✓	510	510	✓	✓	✓	9,100	9K1	✓	✓	✓	180,000	180K	✓	✓	✓
1.8	1R8	✓	✓	✓	33	33R	✓	✓	✓	560	560	✓	✓	✓	10,000	10K	✓	✓	✓	200,000	200K	✓	✓	✓
2	2R0	✓	✓	✓	36	36R	✓	✓	✓	620	620	✓	✓	✓	11,000	11K	✓	✓	✓	220,000	220K	✓	✓	✓
2.2	2R2	✓	✓	✓	39	39R	✓	✓	✓	680	680	✓	✓	✓	12,000	12K	✓	✓	✓	240,000	240K	✓	✓	✓
2.4	2R4	✓	✓	✓	43	43R	✓	✓	✓	750	750	✓	✓	✓	13,000	13K	✓	✓	✓	270,000	270K	✓	✓	✓
2.7	2R7	✓	✓	✓	47	47R	✓	✓	✓	820	820	✓	✓	✓	15,000	15K	✓	✓	✓	300,000	300K	✓	✓	✓
3	3R0	✓	✓	✓	51	51R	✓	✓	✓	910	910	✓	✓	✓	16,000	16K	✓	✓	✓	330,000	330K	✓	✓	✓
3.3	3R3	✓	✓	✓	56	56R	✓	✓	✓	1,000	1K0	✓	✓	✓	18,000	18K	✓	✓	✓	360,000	360K	✓	✓	✓
3.6	3R6	✓	✓	✓	62	62R	✓	✓	✓	1,100	1K1	✓	✓	✓	20,000	20K	✓	✓	✓	390,000	390K	✓	✓	✓
3.9	3R9	✓	✓	✓	68	68R	✓	✓	✓	1,200	1K2	✓	✓	✓	22,000	22K	✓	✓	✓	430,000	430K	✓	✓	✓
4.3	4R3	✓	✓	✓	75	75R	✓	✓	✓	1,300	1K3	✓	✓	✓	24,000	24K	✓	✓	✓	470,000	470K	✓	✓	✓
4.7	4R7	✓	✓	✓	82	82R	✓	✓	✓	1,500	1K5	✓	✓	✓	30,000	30K	✓	✓	✓	510,000	510K	✓	✓	✓
5.1	5R1	✓	✓	✓	91	91R	✓	✓	✓	1,600	1K6	✓	✓	✓	33,000	33K	✓	✓	✓	560,000	560K	✓	✓	✓
5.6	5R6	✓	✓	✓	100	100	✓	✓	✓	1,800	1K8	✓	✓	✓	36,000	36K	✓	✓	✓	620,000	620K	✓	✓	✓
6.2	6R2	✓	✓	✓	110	110	✓	✓	✓	2,000	2K0	✓	✓	✓	39,000	39K	✓	✓	✓	680,000	680K	✓	✓	✓
6.8	6R8	✓	✓	✓	120	120	✓	✓	✓	2,200	2K0	✓	✓	✓	43,000	43K	✓	✓	✓	750,000	750K	✓	✓	✓
7.5	7R5	✓	✓	✓	130	130	✓	✓	✓	2,400	2K4	✓	✓	✓	47,000	47K	✓	✓	✓	820,000	820K	✓	✓	✓
8.2	8R2	✓	✓	✓	150	150	✓	✓	✓	2,700	2K7	✓	✓	✓	51,000	51K	✓	✓	✓	910,000	910K	✓	✓	✓
9.1	9R1	✓	✓	✓	160	160	✓	✓	✓	3,000	3K0	✓	✓	✓	56,000	56K	✓	✓	✓	1 MEG	1M0	✓	✓	✓
10	10R	✓	✓	✓	180	180	✓	✓	✓	3,300	3K3	✓	✓	✓	62,000	62K	✓	✓	✓					
11	11R	✓	✓	✓	200	200	✓	✓	✓	3,600	3K6	✓	✓	✓	68,000	68K	✓	✓	✓					
12	12R	✓	✓	✓	220	220	✓	✓	✓	3,900	3K9	✓	✓	✓	75,000	75K	✓	✓	✓					
13	13R	✓	✓	✓	240	240	✓	✓	✓	4,300	4K3	✓	✓	✓	82,000	82K	✓	✓	✓					
15	15R	✓	✓	✓	270	270	✓	✓	✓	4,700	4K7	✓	✓	✓	91,000	91K	✓	✓	✓					
16	16R	✓	✓	✓	330	330	✓	✓	✓	5,100	5K1	✓	✓	✓	100,000	100K	✓	✓	✓					

+ = Most popular standard values  
 ✓ = Standard values  
 ✕ = Non-standard values subject to minimum handling charge per item