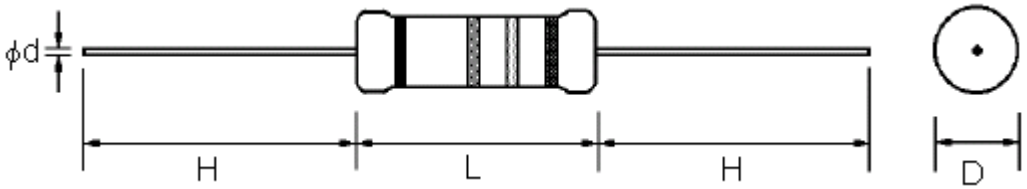
MCF 0.5W Series

Carbon Film Resistors

Features:

- Automatically insertable.
- High quality performance.
- Non-flame type available.
- Cost effective and commonly used.
- Too low or too high values can be supplied on a case to case basis.



Performance Specifications:

Temperature coefficient	: ±350PPM/°C for ≤10Ω. ±450PPM/°C for 11Ω - 99KΩ. 0 ~ -700PPM/°C for 100KΩ ~ 10MΩ. 0 ~ -1500PPM/°C for 1.1MΩ ~ 10MΩ.
Short-time overload	: ΔR/R ≤ ±(1.0% +0.05Ω), with no evidence of mechanical damage.
Minimum insulation resistance	: 10,000 Megaohm.
Dielectric withstanding voltage	: No evidence of flashover, mechanical damage, arcing or insulation breakdown.
Terminal strength	: No evidence of mechanical damage.
Resistance to soldering heat	: ΔR/R ≤ ±(1.0% +0.05Ω), with no evidence of mechanical damage.
Minimum solderability	: 95% coverage.
Resistance to solvent	: No deterioration of protective coating and markings.
Temperature cycling	: ΔR/R ≤ ±(1.0% +0.05Ω), with no evidence of mechanical damage.
Load life in humidity	: Normal type : ΔR/R ±3% for <100KΩ, ±5% for ≥100KΩ Non-flame type : ΔR/R ±5% for <100KΩ, ±10% for ≥100KΩ.
Load life	: Normal type : ΔR/R ±2% for <56KΩ, ±3% for ≥56KΩ Non-flame type : ΔR/R ±5% for <100KΩ, ±10% for ≥100KΩ.
Operating temperature	: -55°C to +155°C.

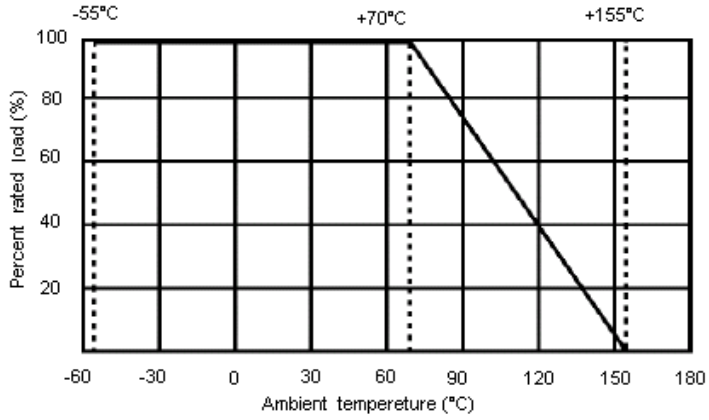
Specification Table

Series	Power Rating at 70ºC (W)	Dimension				Maximum Working Voltage (V)	Maximum Overload Voltage (V)	Dielectric Withstanding Voltage (V)	Resistance Range
		Maximum Diameter (D)	Maximum Length (L)	Height (H ±3)	Lead Diameter (d ±0.05)				
MCF 0.5W	1/2 (0.5)	3.0	9.0	28.0	0.6	350	700	700	1Ω ~ 10MΩ

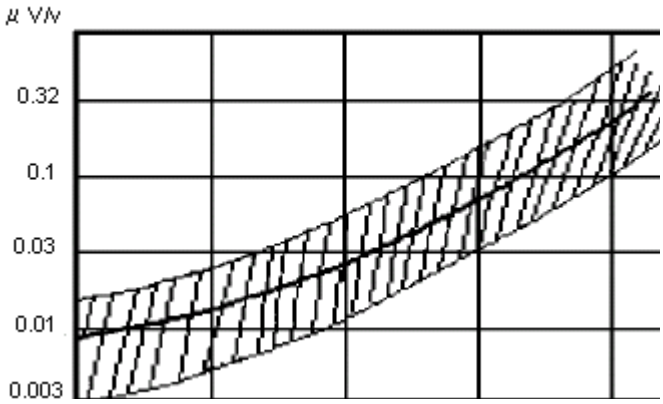
Note: Standard E - 24 series values in ±5% tolerance.

Dimensions : Millimetres

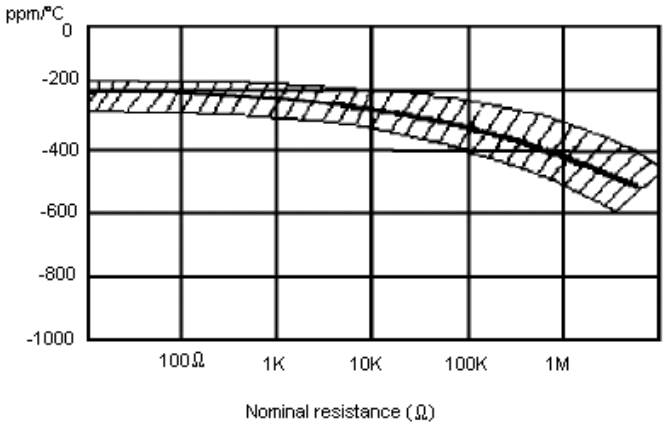
Derating Curve



Current Noise



Temperature Coefficient

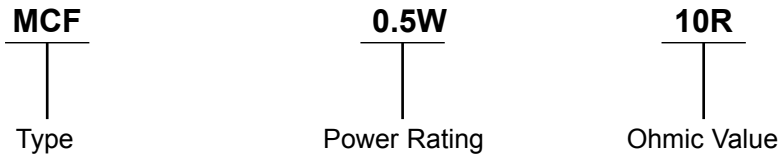


Resistance Preferred Value Range

E6	E12	E24	E96	E6	E12	E24	E96	E6	E12	E24	E96
10	10	10	10.0				21.5				46.4
			10.2	22	22	22	22.1	47	47	47	47.5
			10.5				22.6				48.7
			10.7				23.2				49.9
		11	11.0				23.7			51	51.1
			11.3			24	24.3				52.3
			11.5				24.9				53.6
			11.8				25.5				54.9
	12	12	12.1				26.1		56	56	56.2
			12.4				27.7				57.6
			12.7		27	27	27.4				59.0
		13	13.0				28.0				60.4
			13.3				28.7			62	61.9
			13.7				29.4				63.4
			14.0			30	30.1				64.9
			14.3				30.9				66.5
			14.7				31.6	68	68	68	68.1
15	15	15	15.0				32.4				69.8
			15.4	33	33	33	33.2				71.5
			15.8				34.0				73.2
		16	16.2				34.8			75	75.0
			16.5				35.7				76.8
			16.9			36	36.5				78.7
			17.4				37.4				80.6
			17.8				38.3		82	82	82.5
	18	18	18.2		39	39	39.2				84.5
			18.7				40.2				86.6
			19.1				41.2				88.7
			19.6				42.2			91	90.9
		20	20.0			43	43.2				93.1
			20.5				44.2				95.3
			21.0				45.3				97.6

Above values in accordance with IEC Publication 63 (1963) and BS2488

Part Number Explanation



Ohmic Value **:** Where R = Ohms = Ω
K = Kiloohms = KΩ
M = Megaohms = MΩ
And replaces the decimal point.
eg: 1R5 = 1.5Ω
4K7 = 4.7KΩ
6M8 = 6.8MΩ.

Stocked Values

Tolerance	Wattage (W)	Preferred Value Range	Range Value
5%	0.5	E24	1R - 10M

Notes:

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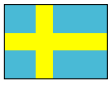

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