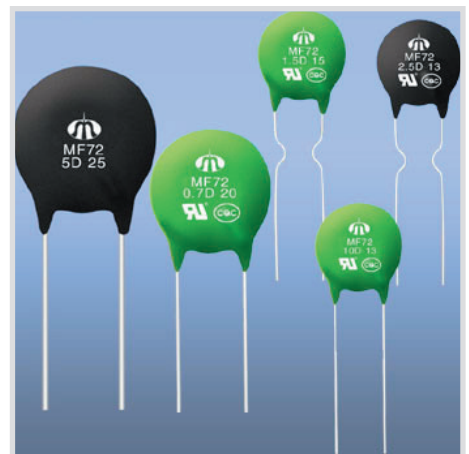


MF72



CANTHERM

Supplying high-quality bimetal and thermal sensor products.



Power NTC Thermistor

Specification

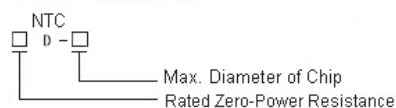


Figure 1 shows four schematic diagrams. Diagrams I, II, and III are cross-sectional views of probes. Diagram I has a circular head of diameter D , a total length L , and a shaft diameter d . Diagram II has a circular head of diameter D , a total length L (divided into L_1 and L_2), a shaft diameter d , and a maximum thickness of 4max . Diagram III has a circular head of diameter D , a total length L (divided into L_1 and L_2), a shaft diameter d , and a maximum thickness of 4max . Diagram A is a detail of the probe tip, showing a rectangular head of thickness T and a shaft of diameter d .

Part No. / Dim(mm) / Sym	Dmax	Tmax	d +/- 0.05	F1 +/-1	F2 +/-1.5	Straight Lead Wire	Curved Lead Wire		A +/- .5
			Fig. II / I	Fig. II / I	Fig. II / I	Lmin.	b L1min	L2+/-2	
MF72- □D5	7	5	0.6 / 0.45	5 / 2.5	3	25 *	17/5	8/5	1.65
MF72- □D7	9	5	0.6	5	3	25	17/5	8/5	1.9
MF72- □D9	11	5.5	0.8 / 0.6	7.5 / 5	5 / 3	25	17/5	8/5	2.3
MF72- □D11	13	5.5	0.8	7.5 / 5	5 / 3	25	17/5	8/5	2.6
MF72- □D13	15.5	6	0.8	7.5	5	25	17/5	8/5	2.6
MF72- □D15	17.5	6	0.8	10 / 7.5	5	25	17/5	8/5	2.8
MF72- □D20	22.5	7	1.0	10 / 7.5	/	25 *	/	/	3.5
MF72- □D25	27.5	8	1.0	10	/	25 *	/	/	3.5
Remark	a, rated zero-power resistance b, 17/5 17 indicates the long bent lead wire, 5 indicates the short bent lead wire (Fig. III) Illustration: In general, the long bent lead wire is used, see figure II * Straight Leads are Standard								

Application

Can be installed into the power circuits of:

- Power supplies and inverters
- Uninterruptible Power Supplies
- Energy saving lamps
- Electronic Ballasts
- Filament Protection of various types of lamps
- Some types of heaters
- For higher power circuits ask about the MF73 and MF74 series surge suppressors.

Characteristics

- Small Size and fast response
- High Power handling capability
- Fast response to surge current
- High material constant (B value)
- Low residual resistance
- Wide operating temperature range -55 to +200C
- R25 allowable tolerance is $\pm 20\%$
- Long-term Stability and Reliability
- UL 1434 File# E241319
- CQC File# 04001010556

Main Techno-Parameter

Operating Temperature: -55 to 200°C

Part No.	R ₂₅ (Ω)	Max. Steady State Current (A)	Approx. R of Max. Current (Ω)	Dissip. Coef. (mW/°C)	Thermal Time Constant (S)	Max. Load Capacitance in uF		UL
						120 VAC	240 VAC	
MF72-5D5	5	1	0.353	6	20	188	47	
MF72-10D5	10	0.7	0.771	6	20	188	47	
MF72-60D5	60	0.5	1.878	6	18	188	47	
MF72-200D5	200	0.1	18.70	6	18	88	22	
MF72-5D7	5	2	0.283	10	30	224	56	
MF72-8D7	8	1	0.539	9	28	224	56	
MF72-10D7	10	1	0.616	9	27	224	56	
MF72-12D7	12	1	0.816	9	27	224	56	
MF72-16D7	16	0.7	1.003	9	27	224	56	
MF72-22D7	22	0.6	1.108	9	27	224	56	
MF72-33D7	33	0.5	1.485	10	28	188	47	
MF72-200D7	200	0.2	11.65	11	28	188	47	
MF72-3D9	3	4	0.120	11	35	272	68	✓
MF72-4D9	4	3	0.190	11	35	272	68	✓
MF72-5D9	5	3	0.210	11	34	272	68	✓
MF72-6D9	6	2	0.315	11	34	272	68	✓
MF72-8D9	8	2	0.400	11	32	400	100	✓
MF72-10D9	10	2	0.458	11	32	400	100	✓
MF72-12D9	12	1	0.652	11	32	400	100	✓
MF72-16D9	16	1	0.802	11	31	400	100	✓
MF72-20D9	20	1	0.864	11	30	600	150	✓
MF72-22D9	22	1	0.950	11	30	600	150	✓
MF72-30D9	30	1	1.022	11	30	600	150	✓
MF72-33D9	33	1	1.124	11	30	600	150	✓
MF72-50D9	50	1	1.252	11	30	600	150	✓
MF72-60D9	60	0.8	1.502	11	30	600	150	✓
MF72-80D9	80	0.8	2.010	11	30	272	68	✓

Part No.	R ₂₅ (Ω)	Max. Steady State Current (A)	Approx. R of Max. Current (Ω)	Dissip. Coef. (mW/°C)	Thermal Time Constant (S)	Max. Load Capacitance in uF		UL
						120 VAC	240 VAC	
MF72-120D9	120	0.8	3.015	11	30	272	68	✓
MF72-200D9	200	0.5	5.007	11	32	188	47	✓
MF72-400D9	400	0.2	30.30	11	32	188	47	✓
MF72-2.5D11	2.5	5	0.095	13	43	600	150	✓
MF72-3D11	3	5	0.100	13	43	600	150	✓
MF72-4D11	4	4	0.150	13	44	600	150	✓
MF72-5D11	5	4	0.156	13	45	600	150	✓
MF72-6D11	6	3	0.240	13	45	880	220	✓
MF72-8D11	8	3	0.255	14	47	880	220	✓
MF72-10D11	10	3	0.275	14	47	880	220	✓
MF72-12D11	12	2	0.462	14	48	880	220	✓
MF72-16D11	16	2	0.470	14	50	880	220	✓
MF72-20D11	20	2	0.512	15	52	880	220	✓
MF72-22D11	22	2	0.563	15	52	880	220	✓
MF72-30D11	30	1.5	0.667	15	52	880	220	✓
MF72-33D11	33	1.5	0.734	15	52	880	220	✓
MF72-50D11	50	1.5	1.021	15	52	880	220	✓
MF72-60D11	60	1.5	1.215	15	52	880	220	✓
MF72-80D11	80	1.2	1.656	15	52	600	150	✓
MF72-1.3D13	1.3	7	0.062	13	60	880	220	✓
MF72-1.5D13	1.5	7	0.073	13	60	880	220	✓
MF72-2.5D13	2.5	6	0.088	13	60	880	220	✓
MF72-3D13	3	6	0.092	14	60	880	220	✓
MF72-4D13	4	5	0.120	15	67	880	220	✓
MF72-5D13	5	5	0.125	15	68	880	220	✓
MF72-6D13	6	4	0.170	15	65	880	220	✓
MF72-7D13	7	4	0.188	15	65	1320	330	✓

— Main Techno-Parameter (cont.)

Operating Temperature: -55 to 200°C

Part No.	R ₂₅ (Ω)	Max. Steady State Current (A)	Approx. R of Max. Current (Ω)	Dissip. Coef. (mW/°C)	Thermal Time Constant (S)	Max. Load Capacitance in uF		UL
						120 VAC	240 VAC	
MF72-8D13	8	4	0.194	15	60	1320	330	✓
MF72-10D13	10	4	0.206	15	65	1320	330	✓
MF72-12D13	12	3	0.316	16	65	1320	330	✓
MF72-15D13	15	3	0.335	16	60	1320	330	✓
MF72-16D13	16	3	0.338	16	60	1320	330	✓
MF72-20D13	20	3	0.372	16	65	1320	330	✓
MF72-30D13	30	2.5	0.517	16	65	1320	330	✓
MF72-47D13	47	2	0.810	17	65	880	220	✓
MF72-120D13	120	1.5	2.124	16	65	880	220	✓
MF72-1.3D15	1.3	8	0.048	18	68	1320	330	✓
MF72-1.5D15	1.5	8	0.052	19	69	1320	330	✓
MF72-3D15	3	7	0.075	18	76	1320	330	✓
MF72-5D15	5	6	0.112	20	76	1880	470	✓
MF72-6D15	6	5	0.155	20	80	1880	470	✓
MF72-7D15	7	5	0.173	20	80	1880	470	✓
MF72-8D15	8	5	0.178	20	80	1880	470	✓
MF72-10D15	10	5	0.180	20	75	1880	470	✓
MF72-12D15	12	4	0.250	20	75	1880	470	✓
MF72-15D15	15	4	0.268	21	85	1880	470	✓
MF72-16D15	16	4	0.276	21	70	1880	470	✓
MF72-20D15	20	4	0.288	17	86	1880	470	✓
MF72-30D15	30	3.5	0.438	18	75	1320	330	✓

Part No.	R ₂₅ (Ω)	Max. Steady State Current (A)	Approx. R of Max. Current (Ω)	Dissip. Coef. (mW/°C)	Thermal Time Constant (S)	Max. Load Capacitance in uF		UL
						120 VAC	240 VAC	
MF72-47D15	47	3	0.680	21	86	1320	330	✓
MF72-120D15	120	2.5	1.652	22	87	1320	330	✓
MF72-0.7D20	0.7	12	0.018	25	112	1880	470	✓
MF72-1.3D20	1.3	9	0.037	24	113	1880	470	✓
MF72-3D20	3	8	0.055	24	113	1880	470	✓
MF72-5D20	5	7	0.087	23	112	2240	560	✓
MF72-6D20	6	6	0.113	25	114	2240	560	✓
MF72-8D20	8	6	0.142	25	115	2240	560	✓
MF72-10D20	10	6	0.162	24	113	2240	560	✓
MF72-12D20	12	5	0.195	24	114	2720	680	✓
MF72-16D20	16	5	0.212	25	113	2720	680	✓
MF72-0.7D25	0.7	13	0.014	30	151	2240	560	
MF72-1.5D25	1.5	10	0.027	30	152	2240	560	
MF72-3D25	3	9	0.044	32	150	2240	560	
MF72-5D25	5	8	0.070	32	151	2720	680	
MF72-8D25	8	7	0.114	33	151	2720	680	
MF72-10D25	10	7	0.130	32	150	2720	680	
MF72-12D25	12	6	0.156	32	150	3280	820	
MF72-16D25	16	6	0.160	35	152	3280	820	

Note: Unless otherwise specified, the allowable tolerance of R₂₅ is +/- 20%
Specifications may change without notice.



CANTHERM
Supplying high-quality bimetal and thermal sensor products.

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