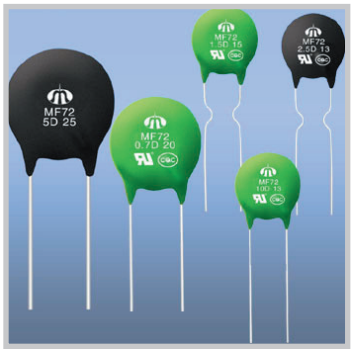
MF72

Supplying high-quality bimetal and thermal sensor products.

Power NTC Thermistor

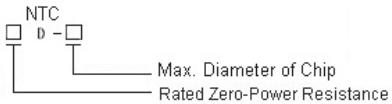
MF72



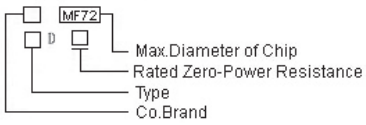
Power NTC Thermistor. The MF72 series Power NTC Thermistors provide inrush current suppression for sensitive electronics. Connecting a MF72 in series with the power source will limit the current surges typically created at turn on. Once the circuit is energized the resistance of the MF72 will decrease rapidly to a very low value, power consumption can be ignored and there will be no effect on normal operating current. Using the MF72 Power NTC Thermistor is a most cost-effective way to curb surge current and protect sensitive electronics from damage.

Specification

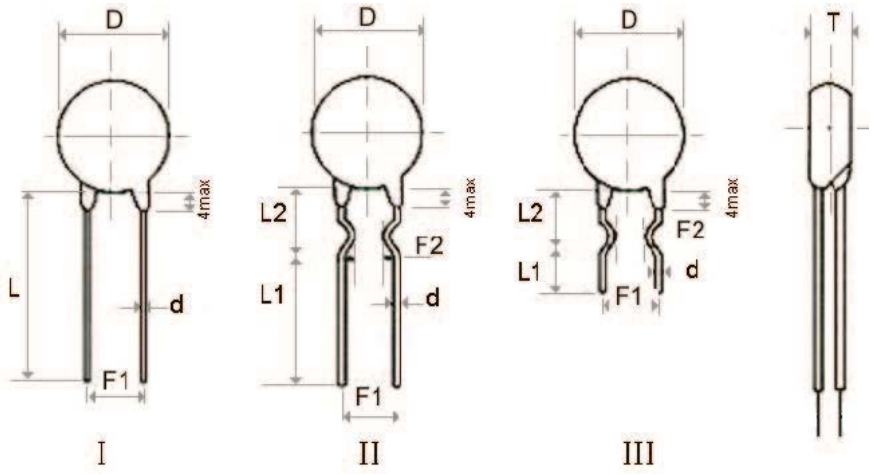
Non-Branded Marking



Branded Marking



Dimensions (mm)



Add suffix "L" + Fig. #
to specify optional leads.

Part No. / Dim(mm) / Sym	Dmax	Tmax	d +/- 0.05	F_1 +/-1	F_2 +/-1.5	Straight Lead Wire	Curved Lead Wire	
			Fig. I / II	Fig. I / II	Fig. II / III	Lmin.	L1min.	L_2+/-2
MF72- ❑D5	7	5	0.6 / 0.45	5 / 2.5	3	25 *	17/5	5
MF72- ❑D7	9	5	0.6	5	3	25	17/5	5
MF72- ❑D9	11	5.5	0.8 / 0.6	7.5 / 5	5 / 3	25	17/5	8
MF72- ❑D11	13	5.5	0.8	7.5 / 5	5 / 3	25	17/5	8
MF72- ❑D13	15.5	6	0.8	7.5	5	25	17/5	5
MF72- ❑D15	17.5	6	0.8	10 / 7.5	5	25	17/5	5
MF72- ❑D20	22.5	7	1.0	10 / 7.5	/	25 *	/	/
MF72- ❑D25	27.5	8	1.0	10	/	25 *	/	/
Remark	L1min., 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 ±20%
- Long-term Stability and Reliability
- UL 1434 File# E241319
- CQC File# 04001010556

Main Techno-Parameter

Operating Temperature: -55 to 200ºC

Part No.	R_{25} (Ω)	Max. Steady State Current (A)	Approx. R of Max. Current (Ω)	Dissip. Coef. (mW/ºC)	Thermal Time Constant (S)	Max. Load Capacitance in uF		UL
						120 VAC	240 VAC	
MF72-005D5	5	1	0.353	6	20	188	47	
MF72-010D5	10	0.7	0.771	6	20	188	47	
MF72-060D5	60	0.3	1.878	6	18	188	47	
MF72-200D5	200	0.1	18.70	6	18	88	22	
MF72-005D7	5	2	0.283	10	30	224	56	
MF72-008D7	8	1	0.539	9	28	224	56	
MF72-010D7	10	1	0.616	9	27	224	56	
MF72-012D7	12	1	0.816	9	27	224	56	
MF72-016D7	16	0.7	1.003	9	27	224	56	
MF72-022D7	22	0.6	1.108	9	27	224	56	
MF72-033D7	33	0.5	1.485	10	28	188	47	
MF72-200D7	200	0.2	11.65	11	28	188	47	
MF72-003D9	3	4	0.120	11	35	272	68	√
MF72-004D9	4	3	0.190	11	35	272	68	√
MF72-005D9	5	3	0.210	11	34	272	68	√
MF72-006D9	6	2	0.315	11	34	272	68	√
MF72-008D9	8	2	0.400	11	32	400	100	√
MF72-010D9	10	2	0.458	11	32	400	100	√
MF72-012D9	12	1	0.652	11	32	400	100	√
MF72-016D9	16	1	0.802	11	31	400	100	√
MF72-020D9	20	1	0.864	11	30	600	150	√
MF72-022D9	22	1	0.950	11	30	600	150	√
MF72-030D9	30	1	1.022	11	30	600	150	√
MF72-033D9	33	1	1.124	11	30	600	150	√
MF72-050D9	50	1	1.252	11	30	600	150	√
MF72-060D9	60	0.8	1.502	11	30	600	150	√
MF72-080D9	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/ºC)	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	√
MF72-002.5D11	2.5	5	0.095	13	43	600	150	√
MF72-003D11	3	5	0.100	13	43	600	150	√
MF72-004D11	4	4	0.150	13	44	600	150	√
MF72-005D11	5	4	0.156	13	45	600	150	√
MF72-006D11	6	3	0.240	13	45	880	220	√
MF72-008D11	8	3	0.255	14	47	880	220	√
MF72-010D11	10	3	0.275	14	47	880	220	√
MF72-012D11	12	2	0.462	14	48	880	220	√
MF72-016D11	16	2	0.470	14	50	880	220	√
MF72-020D11	20	2	0.512	15	52	880	220	√
MF72-022D11	22	2	0.563	15	52	880	220	√
MF72-030D11	30	1.5	0.667	15	52	880	220	√
MF72-033D11	33	1.5	0.734	15	52	880	220	√
MF72-050D11	50	1.5	1.021	15	52	880	220	√
MF72-060D11	60	1.5	1.215	15	52	880	220	√
MF72-080D11	80	1.2	1.656	15	52	600	150	√
MF72-001.3D13	1.3	7	0.062	13	60	880	220	√
MF72-001.5D13	1.5	7	0.073	13	60	880	220	√
MF72-002.5D13	2.5	6	0.088	13	60	880	220	√
MF72-003D13	3	6	0.092	14	60	880	220	√
MF72-004D13	4	5	0.120	15	67	880	220	√
MF72-005D13	5	5	0.125	15	68	880	220	√
MF72-006D13	6	4	0.170	15	65	880	220	√
MF72-007D13	7	4	0.188	15	65	1320	330	√

Main Techno-Parameter (cont.)

Operating Temperature: -55 to 200ºC

Part No.	R_{25} (Ω)	Max. Steady State Current (A)	Approx. R of Max. Current (Ω)	Dissip. Coef. (mW/ºC)	Thermal Time Constant (S)	Max. Load Capacitance in uF		UL
						120 VAC	240 VAC	
MF72-008D13	8	4	0.194	15	60	1320	330	√
MF72-010D13	10	4	0.206	15	65	1320	330	√
MF72-012D13	12	3	0.316	16	65	1320	330	√
MF72-015D13	15	3	0.335	16	60	1320	330	√
MF72-016D13	16	3	0.338	16	60	1320	330	√
MF72-020D13	20	3	0.372	16	65	1320	330	√
MF72-030D13	30	2.5	0.517	16	65	1320	330	√
MF72-047D13	47	2	0.810	17	65	880	220	√
MF72-120D13	120	1.2	2.124	16	65	880	220	√
MF72-001.3D15	1.3	8	0.048	18	68	1320	330	√
MF72-001.5D15	1.5	8	0.052	19	69	1320	330	√
MF72-003D15	3	7	0.075	18	76	1320	330	√
MF72-005D15	5	6	0.112	20	76	1880	470	√
MF72-006D15	6	5	0.155	20	80	1880	470	√
MF72-007D15	7	5	0.173	20	80	1880	470	√
MF72-008D15	8	5	0.178	20	80	1880	470	√
MF72-010D15	10	5	0.180	20	75	1880	470	√
MF72-012D15	12	4	0.250	20	75	1880	470	√
MF72-015D15	15	4	0.268	21	85	1880	470	√
MF72-016D15	16	4	0.276	21	70	1880	470	√
MF72-020D15	20	4	0.288	17	86	1880	470	√
MF72-030D15	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/ºC)	Thermal Time Constant (S)	Max. Load Capacitance in uF		UL
						120 VAC	240 VAC	
MF72-047D15	47	3	0.680	21	86	1320	330	√
MF72-120D15	120	1.8	1.652	22	87	1320	330	√
MF72-000.7D20	0.7	11	0.018	25	89	1880	470	√
MF72-001.3D20	1.3	9	0.037	24	88	1880	470	√
MF72-003D20	3	8	0.055	24	88	1880	470	√
MF72-005D20	5	7	0.087	23	87	2240	560	√
MF72-006D20	6	6	0.113	25	103	2240	560	√
MF72-008D20	8	6	0.142	25	105	2240	560	√
MF72-010D20	10	6	0.162	24	102	2240	560	√
MF72-012D20	12	5	0.195	24	100	2720	680	√
MF72-016D20	16	5	0.212	25	100	2720	680	√
MF72-000.7D25	0.7	12	0.014	30	120	2240	560	
MF72-001.5D25	1.5	10	0.027	30	121	2240	560	
MF72-003D25	3	9	0.044	32	124	2240	560	
MF72-005D25	5	8	0.070	32	125	2720	680	
MF72-008D25	8	7	0.114	33	125	2720	680	
MF72-0010D25	10	7	0.130	32	125	2720	680	
MF72-012D25	12	6	0.156	32	126	3280	820	
MF72-016D25	16	6	0.160	35	126	3280	820	

Note: Unless otherwise specified, the allowable tolerance of R_{25} is +/- 20%
Specifications may change without notice.

C US

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