WAY-ON

NTC THERMISTOR

MF72 Series

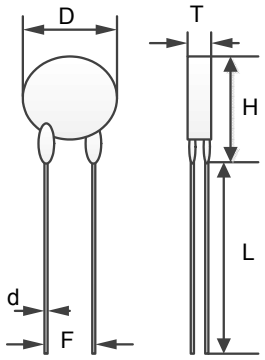
Features

- Small size, high power
- Fast response times
- Great surge current capability
- Large material constant (B value), small residual resistance
- High reliability

Application

- UPS and switching power supplies
- Electric heaters
- Energy saving lamps
- Electronic ballast
- Color display tube
- Lighting filament protection

Structure



Dimensions Table

Dimensions Code	Type、Dimensions (mm)							
	D-5	D-7	D-9	D-11	D-13	D-15	D-20	D-25
Dmax	7.0	9.0	11.0	13.0	15.5	17.5	22.5	27.5
Tmax	5.0	5.0	5.5	5.5	6.0	6.0	7	8.0
Lmin	25	25	25	25	25	25	25	25
d±0.05	0.6/0.45	0.6	0.8/0.6	0.8	0.8	0.8	1.0	1.0
F±1	5.0/2.5	5.0	7.5/5.0	7.5/5.0	7.5	10/7.5	10/7.5	10

Electrical Specifications

Type	Zero Power Resistance (Ω)±20%	Imax(A)	Approx. R of Max. Current (Ω)	Thermal Dissipation Constant(mW/℃)	Thermal Time constant τ (s)	Operation Temperature(℃)
MF72-5D5	5	1	0.353	6	20	-55～+200
MF72-10D5	10	0.7	0.771	6	20	
MF72-60D5	60	0.5	1.878	6	18	
MF72-200D5	200	0.1	6.259	6	18	
MF72-5D7	5	2	0.283	10	30	
MF72-8D7	8	1	0.539	9	28	
MF72-10D7	10	1	0.616	9	27	
MF72-12D7	12	1	0.816	9	27	
MF72-16D7	16	0.7	1.003	9	27	
MF72-22D7	22	0.6	1.108	9	27	
MF72-33D7	33	0.5	1.485	10	28	
MF72-200D7	200	0.2	6.233	11	28	
MF72-3D9	3	4	0.12	11	35	
MF72-4D9	4	3	0.19	11	35	
MF72-5D9	5	3	0.21	11	34	
MF72-6D9	6	2	0.315	11	34	
MF72-8D9	8	2	0.4	11	32	
MF72-10D9	10	2	0.458	11	32	
MF72-12D9	12	1	0.652	11	32	
MF72-16D9	16	1	0.802	11	31	
MF72-20D9	20	1	0.864	11	30	
MF72-22D9	22	1	0.95	11	30	
MF72-30D9	30	1	1.022	11	30	
MF72-33D9	33	1	1.124	11	30	
MF72-50D9	50	1	1.252	11	30	
MF72-60D9	60	0.8	1.502	11	30	
MF72-80D9	80	0.8	2.01	11	30	
MF72-120D9	120	0.8	3.015	11	30	
MF72-200D9	200	0.5	5.007	11	32	
MF72-400D9	400	0.2	9.852	11	32	
MF72-2.5D11	2.5	5	0.095	13	43	
MF72-3D11	3	5	0.1	13	43	
MF72-4D11	4	4	0.15	13	44	
MF72-5D11	5	4	0.156	13	45	
MF72-6D11	6	3	0.24	13	45	
MF72-8D11	8	3	0.255	14	47	
MF72-10D11	10	3	0.275	14	47	
MF72-12D11	12	2	0.462	14	48	
MF72-16D11	16	2	0.47	14	50	
MF72-20D11	20	2	0.512	15	52	
MF72-22D11	22	2	0.563	15	52	
MF72-30D11	30	1.5	0.667	15	52	
MF72-33D11	33	1.5	0.734	15	52	

MF72-50D11	50	1.5	1.021	15	52	
MF72-60D11	60	1.5	1.215	15	52	
MF72-80D11	80	1.2	1.656	15	52	
MF72-1.3D13	1.3	7	0.062	13	60	
MF72-1.5D13	1.5	7	0.073	13	60	
MF72-2.5D13	2.5	6	0.088	13	60	
MF72-3D13	3	6	0.092	14	60	
MF72-4D13	4	5	0.12	15	67	
MF72-5D13	5	5	0.125	15	68	
MF72-6D13	6	4	0.17	15	65	
MF72-7D13	7	4	0.188	15	65	
MF72-8D13	8	4	0.194	15	60	
MF72-10D13	10	4	0.206	15	65	
MF72-12D13	12	3	0.316	16	65	
MF72-15D13	15	3	0.335	16	60	
MF72-16D13	16	3	0.338	16	60	
MF72-20D13	20	3	0.372	16	65	
MF72-30D13	30	2.5	0.517	16	65	
MF72-47D13	47	2	0.81	17	65	
MF72-120D13	120	1.5	2.124	16	65	
MF72-1.3D15	1.3	8	0.048	18	68	
MF72-1.5D15	1.5	8	0.052	19	69	
MF72-3D15	3	7	0.075	18	76	
MF72-5D15	5	6	0.112	20	76	
MF72-6D15	6	5	0.155	20	80	
MF72-7D15	7	5	0.173	20	80	
MF72-8D15	9	5	0.178	20	80	
MF72-10D15	10	5	0.18	20	75	
MF72-12D15	12	4	0.25	20	75	
MF72-15D15	15	4	0.268	21	85	
MF72-16D15	16	4	0.276	21	70	
MF72-20D15	20	4	0.288	17	86	
MF72-30D15	30	3.5	0.438	18	75	
MF72-47D15	47	3	0.68	21	86	
MF72-120D15	120	2.5	1.652	22	87	
MF72-0.7D20	0.7	12	0.018	25	112	
MF72-1.3D20	1.3	9	0.037	24	113	
MF72-3D20	3	8	0.055	24	113	
MF72-5D20	5	7	0.087	23	112	
MF72-6D20	6	6	0.113	25	114	
MF72-8D20	8	6	0.142	25	115	
MF72-10D20	10	6	0.162	24	113	
MF72-12D20	12	5	0.195	24	114	
MF72-16D20	16	5	0.212	25	113	
MF72-0.7D25	0.7	13	0.014	30	151	
MF72-1.5D25	1.5	10	0.027	30	152	
MF72-3D25	3	9	0.044	32	150	
MF72-5D25	5	8	0.07	32	151	
MF72-8D25	8	7	0.114	33	151	

MF72-10D25	10	7	0.13	32	150	
MF72-12D25	12	6	0.156	32	150	
MF72-16D25	16	6	0.16	35	152	

Electrical Characteristics

Characteristics	Test Methods
Zero Power Resistance at 25℃	Resistance shall be measured at DC current applied when the self heat generation does not occur at room ambient (25.0±0.2℃)
B Value	After the resistance at 25℃ and 85℃ respectively are measured, the B Value is calculated by the following equation: B=ln(R25/R85)/(1/298.15-1/358.15) R25= Resistance at 25.0±0.2℃ R85= Resistance at 85.0±0.2℃
Thermal Dissipation Constant	Equivalent to the required power to rise temperature of the thermistor up to 1℃ in the air and without cooling of airflow. the unit of the constant is mw/℃
Maximum allowable steady-state current	Maximum allowable steady-state DC current applied at the specified temperature without cooling of airflow
Thermal Time constant	The period of time when the temperature of the specimens is (1-1/e) times the temperature difference shall be measured when the ambient temperature is changed.(e:2.71828)
Voltage withstanding (Between Terminals and coating)	An AC Voltage of 1000V shall be applied. Between the terminals and the insulating coating for one minute at room ambient.
Insulation Resistance (Between Terminals and coating)	Insulation resistance between terminals and the insulating coating shall be measured at 1000Vdc with one minute electrification, and at room ambient.

CONTACT INFORMATION

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