

特点

Features

- 通过 UL、TUV 与 CQC 认证
Certified by UL, TUV, CQC
- 残余电阻小
Low residual resistance
- 应对浪涌电流反应速度快
Fast response to surge current
- 径向引线树脂封装，本体直径 Ø5mm 到 Ø25mm
Radial lead resin coated, diameter Ø5mm to Ø25mm
- 额定功率高、阻值范围广
High power rating, Wide resistance range
- 可适用于自动化生产线
Cost-saving automatic insertion available
- 满足 RoHS 和无卤的要求
RoHS & Halogen Free (HF) compliant



用途

Applications

可以安装到以下电源电路中：

- 电源和逆变器
- 不间断电源
- 节能灯
- 电子镇流器
- 各种灯具的灯丝保护
- 某些类型的加热器
- 对于更高功率的电路，请咨询 MF73 系列浪涌抑制器。

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 series surge suppressors.

安规认证

Safety approval

认证标志 Approval mark	认证标准 Standards	认证范围 Certification scope	认证证书号 Certificate number
	UL 1434 T.I.L. Class No.9073-31	MF72 yD-5x MF72 yD-7x MF72 yD-9x MF72 yD-11x MF72 yD-13x MF72 yD-15x MF72 yD-20x MF72 yD-25x y=0.5-400(R25) x=M(Tolerance of R25)	E527944
	EN 60539-1:2016		R 50545920
	GB/T 6663.1-2007		CQC22001342787

产品编码

Part number

WNT	11	D	220	M	A	I	5	T1	P	Q	Z
NTC 热敏电阻 NTC thermistors	直径 Diameter	形状 Shape	零功率电阻 Zero power resistance (R25)	误差 Tolerance	类别 Type	脚型 Lead style	脚距 Lead spacing	脚长或编带包装方式 Lead length or taping package	包封 Coating	品牌 Trademark	导线材质 Lead wire Material

■ 直径 Diameter

- 05: Ø5.0mm 13: Ø13.0mm
- 07: Ø7.0mm 15: Ø15.0mm
- 09: Ø9.0mm 20: Ø20.0mm
- 11: Ø11.0mm 25: Ø25.0mm

■ 零功率电阻 Zero power resistance (R25)

三位数表示, 单位 Ω, 举例说明如下:

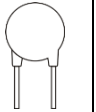
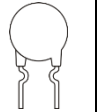
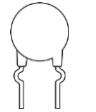
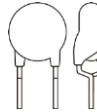
Three-digit numbers are expressed in Ω units, as illustrated by the following:

- 2R2: 2.2Ω (R=小数点 decimal point)
- 220: 22Ω (220=22×10⁰=22Ω)
- 221: 220Ω (220=22×10¹=220Ω)

■ 误差 Tolerance

M: ±20%

■ 脚型 Lead style

Code	S	I	K	V
脚型 Lead style				

■ 脚长或编带包装方式 Lead length or taping package

● 脚长 Lead length(散装 Bulk)

- 03: 3.0±0.5mm;
- 3E: 3.5±0.5mm;
- 04: 4.0±1.0mm;
- 05: 5.0±1.0mm;
- 06: 6.0±1.0mm;
- 08: 8.0±2.0mm;
- 10: 10.0±2.0mm;
- 12: 12.0±2.0mm;
- 25: 25.0±5.0mm;
- 32: 32.0±5.0mm

■ 形状 Shape

D: 圆盘状 Disc

■ 类别 Type

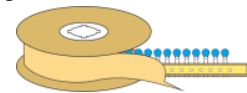
- A: MF72 (通用型 General)
- B: MF73 (大功率 High power)

■ 脚距 Lead spacing

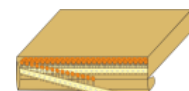
- 3: 5.0±0.8mm
- 5: 7.5±1.0mm
- 6: 10.0±1.0mm
- 7: 12.5±1.0mm

● 编带包装方式 Taping package

R1/R2/R3: 卷盘包装
Reel packing



T1/T2/T3: 折叠包装
Ammo packing



代码 CODE	代码 CODE	P (元件间距离 COMPONENT PITCH)	P0 (孔距 FEED HOLE PITCH)
T1	R1	12.7mm	12.7mm
T2	R2	25.4mm	12.7mm
T3	R3	15.0mm	15.0mm

■ 包装 Coating

- P: 酚醛树脂(黑色)
Phenolic resin (Black)
- G: 硅树脂(绿色)
Silicone resin (Green)

■ 品牌 Trademark

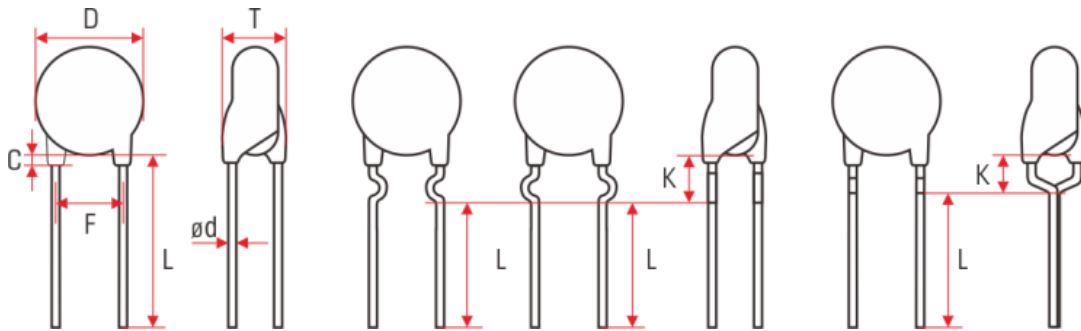
O: WEIDY

■ 导线材质 Lead wire Material

- Z: CP wire
- U: 铜线 Copper wire

结构与尺寸

Structure and Dimensions



D, mm max	7.0	9.0	11.0	13.0	15.5	17.5	22.5	27.5
T, mm max	4.5	5.0	5.5	5.5	6.0	6.0	7.0	8.0
F, mm ±1.0mm	5.0	5.0	7.5 / 5.0	7.5 / 5.0	7.5	10.0 / 7.5	10.0 / 7.5	10.0
L, mm ±5.0mm	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Ød, mm ±0.1mm	0.55	0.55	0.75 / 0.6	0.75 / 0.6	0.75	0.75	1.0	1.0
C, mm max	2.0	2.0	3.0	3.0	3.0	4.0	4.0	4.0
K, mm max	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

电气特性

Electrical Characteristics

■ MF72 yD-5x

规格 Spec	零功率电阻 Zero power resistance (R25)	最大稳态电流 Maximum Current at 25°C (I max)	残余电阻 Residual Resistance at I _{max}	B 值 B-Value (25/85)	电容容量 Recommnd Capacitance (AC240V)	热时间常数 Thermal Time Constant	耗散系数 Dissipation Factor	工作温度 范围 Operaging temperature
	Ω	A	Ω		uF	s	mw/°C	°C
MF72 5D-5 MF72 6D-5 MF72 7D-5	5 6 7	1 0.7 0.7	0.596 0.686 0.772	2700 2700 2700	47 47 47	≤18	≥6	-40~+150
MF72 8D-5 MF72 10D-5 MF72 12D-5	8 10 12	0.7 0.7 0.6	0.863 1.045 1.255	2700 2700 2700	47 47 47			
MF72 15D-5 MF72 16D-5 MF72 18D-5	15 16 18	0.6 0.6 0.6	1.540 1.642 1.865	2800 2800 2800	47 47 47			
MF72 20D-5 MF72 22D-5 MF72 25D-5	20 22 25	0.6 0.6 0.5	2.130 2.191 2.226	2800 2800 2800	47 47 47			
MF72 30D-5 MF72 33D-5 MF72 50D-5	30 33 50	0.5 0.5 0.4	2.313 2.503 2.711	2800 2800 3000	47 47 47			
MF72 60D-5	60	0.3	2.815	3000	47			

浪涌电流抑制型NTC热敏电阻器

LIMITING INRUSH CURRENT TYPE NTC THERMISTORS

WEIDY®

■ MF72 yD-7x

规格 Spec	零功率电阻 Zero power resistance (R25)	最大稳态电流 Maximum Current at 25°C (I max)	残余电阻 Residual Resistance at I _{max}	B 值 B-Value (25/85)	电容容量 Recommend Capacitance (AC240V)	热时间常数 Thermal Time Constant	耗散系数 Dissipation Factor	工作温度 范围 Operating temperature
	Ω	A	Ω		uF	s	mw/°C	°C
MF72 3D-7 MF72 4D-7 MF72 5D-7	3 4 5	3 2 2	0.213 0.257 0.295	2700 2700 2700	100 100 100	≤30	≥9	-40~+150
MF72 6D-7 MF72 7D-7 MF72 8D-7	6 7 8	2 2 1	0.442 0.597 0.746	2700 2700 2700	100 100 100			
MF72 10D-7 MF72 12D-7 MF72 15D-7	10 12 15	1 0.7 0.7	0.795 1.193 1.472	2700 2800 2800	100 100 100			
MF72 16D-7 MF72 18D-7 MF72 20D-7	16 18 20	0.7 0.7 0.6	1.581 1.822 2.011	2800 2800 3000	100 100 100			
MF72 22D-7 MF72 30D-7 MF72 33D-7	22 30 33	0.6 0.5 0.5	2.082 3.727 3.924	3000 3000 3000	100 100 100			
MF72 50D-7	50	0.5	6.486	3000	100			

■ MF72 yD-9x

规格 Spec	零功率电阻 Zero power resistance (R25)	最大稳态电流 Maximum Current at 25°C (I max)	残余电阻 Residual Resistance at I _{max}	B 值 B-Value (25/85)	电容容量 Recommend Capacitance (AC240V)	热时间常数 Thermal Time Constant	耗散系数 Dissipation Factor	工作温度 范围 Operating temperature
	Ω	A	Ω		uF	s	mw/°C	°C
MF72 2.5D-9 MF72 3D-9 MF72 4D-9	2.5 3 4	4 4 3	0.146 0.152 0.263	2700 2700 2700	100 100 100	≤35	≥11	-40~+175
MF72 5D-9 MF72 6D-9 MF72 7D-9	5 6 7	3 2 2	0.272 0.363 0.371	2700 2700 2800	100 100 100			
MF72 8D-9 MF72 10D-9 MF72 12D-9	8 10 12	2 2 1	0.380 0.405 0.993	2800 2800 2800	100 100 150			
MF72 15D-9 MF72 16D-9 MF72 18D-9	15 16 18	1 1 1	1.039 1.045 1.113	2800 3000 3000	150 150 150			
MF72 20D-9 MF72 22D-9 MF72 25D-9	20 22 25	1 1 1	1.192 1.248 1.281	3000 3000 3000	150 150 150			
MF72 30D-9 MF72 33D-9 MF72 50D-9	30 33 50	1 1 1	1.341 1.455 1.492	3000 3000 3100	150 150 150			
MF72 60D-9 MF72 80D-9 MF72 100D-9	60 80 100	0.8 0.8 0.8	1.662 2.213 2.761	3100 3200 3200	150 100 100			
MF72 120D-9 MF72 200D-9	120 200	0.8 0.5	3.331 5.481	3200 3200	100 100			

浪涌电流抑制型NTC热敏电阻器

LIMITING INRUSH CURRENT TYPE NTC THERMISTORS

WEIDY®

■ MF72 yD-11x

规格 Spec	零功率电阻 Zero power resistance (R25)	最大稳态电流 Maximum Current at 25°C (I max)	残余电阻 Residual Resistance at I _{max}	B 值 B-Value (25/85)	电容容量 Recommend Capacitance (AC240V)	热时间常数 Thermal Time Constant	耗散系数 Dissipation Factor	工作温度 范围 Operating temperature
	Ω	A	Ω		μF	s	mw/°C	°C
MF72 1D-11 MF72 1.5D-11 MF72 2D-11	1 1.5 2	5 5 5	0.127 0.131 0.149	2600 2600 2700	150 150 150	≤35	≥11	-40~+175
MF72 2.5D-11 MF72 3D-11 MF72 4D-11	2.5 3 4	5 5 4	0.135 0.135 0.210	2700 2700 2700	150 150 220			
MF72 5D-11 MF72 6D-11 MF72 7D-11	5 6 7	4 3 3	0.215 0.303 0.297	2700 2700 2700	220 330 330			
MF72 8D-11 MF72 10D-11 MF72 12D-11	8 10 12	3 3 2	0.264 0.273 0.356	2700 2800 2800	330 330 330			
MF72 15D-11 MF72 16D-11 MF72 18D-11	15 16 18	2 2 2	0.493 0.513 0.557	2800 3000 3000	330 330 330			
MF72 20D-11 MF72 22D-11 MF72 25D-11	20 22 25	2 2 1.5	0.597 0.597 0.613	3000 3000 3000	330 330 330			
MF72 30D-11 MF72 33D-11 MF72 47D-11	30 33 47	1.5 1.5 1.5	0.739 0.799 1.178	3000 3000 3200	330 330 330			
MF72 50D-11 MF72 60D-11 MF72 80D-11	50 60 80	1.5 1 1	1.264 1.510 2.012	3200 3200 3200	330 330 390			
MF72 100D-11 MF72 120D-11	100 120	0.8 0.8	2.561 2.993	3200 3200	390 390			

■ MF72 yD-13x

规格 Spec	零功率电阻 Zero power resistance (R25)	最大稳态电流 Maximum Current at 25°C (I max)	残余电阻 Residual Resistance at I _{max}	B 值 B-Value (25/85)	电容容量 Recommend Capacitance (AC240V)	热时间常数 Thermal Time Constant	耗散系数 Dissipation Factor	工作温度 范围 Operating temperature
	Ω	A	Ω		μF	s	mw/°C	°C
MF72 1.5D-13 MF72 2.5D-13 MF72 3D-13	1.5 2.5 3	7 6 6	0.093 0.112 0.156	2700 2700 2700	220 220 220	≤70	≥13	-40~+200
MF72 4D-13 MF72 5D-13 MF72 6D-13	4 5 6	5 5 4	0.158 0.161 0.223	2700 2800 2800	220 220 220			
MF72 7D-13 MF72 8D-13 MF72 10D-13	7 8 10	4 4 4	0.241 0.286 0.286	3000 3000 3000	330 330 330			
MF72 12D-13 MF72 15D-13 MF72 16D-13	12 15 16	3 3 3	0.495 0.498 0.463	3000 3100 3100	330 330 330			
MF72 18D-13 MF72 20D-13 MF72 22D-13	18 20 22	3 3 3	0.522 0.574 0.592	3100 3200 3200	330 330 330			
MF72 25D-13 MF72 30D-13 MF72 33D-13	25 30 33	2 2 2	0.632 0.701 0.772	3200 3200 3200	330 330 330			
MF72 47D-13 MF72 50D-13 MF72 60D-13	47 50 60	2 2 2	1.103 1.172 1.405	3200 3200 3200	220 220 220			
MF72 80D-13 MF72 100D-13 MF72 120D-13	80 100 120	1.5 1 1	1.887 2.410 2.796	3200 3200 3200	220 220 220			

浪涌电流抑制型NTC热敏电阻器
LIMITING INRUSH CURRENT TYPE NTC THERMISTORS



■ MF72 yD-15x

规格 Spec	零功率电阻 Zero power resistance (R25)	最大稳态电流 Maximum Current at 25°C (I max)	残余电阻 Residual Resistance at I _{max}	B 值 B-Value (25/85)	电容容量 Recommnd Capacitance (AC240V)	热时间常数 Thermal Time Constant	耗散系数 Dissipation Factor	工作温度 范围 Operaging temperature
	Ω	A	Ω		uF	s	mw/°C	°C
MF72 1.3D-15 MF72 1.5D-15 MF72 2.5D-15	1.3 1.5 2.5	8 8 7	0.092 0.097 0.146	2700 2700 2700	330 330 330	≤90	≥16	-40~+200
MF72 3D-15 MF72 4D-15 MF72 4.7D-15	3 4 4.7	7 6 6	0.148 0.207 0.155	2700 2700 2700	330 470 470			
MF72 5D-15 MF72 6D-15 MF72 6.8D-15	5 6 6.8	6 5 5	0.133 0.196 0.199	2800 2800 2800	470 470 470			
MF72 7D-15 MF72 8D-15 MF72 10D-15	7 8 10	5 5 5	0.201 0.205 0.218	2800 2800 3000	470 470 470			
MF72 12D-15 MF72 15D-15 MF72 16D-15	12 15 16	4 4 4	0.273 0.312 0.318	3000 3200 3200	470 470 470			
MF72 18D-15 MF72 20D-15 MF72 22D-15	18 20 22	4 4 4	0.344 0.353 0.388	3200 3200 3200	470 470 470			
MF72 25D-15 MF72 30D-15 MF72 33D-15	25 30 33	3 3 3	0.446 0.525 0.582	3200 3200 3200	330 330 330			
MF72 40D-15 MF72 47D-15 MF72 50D-15	40 47 50	3 3 3	0.593 0.699 0.742	3200 3200 3200	330 330 330			
MF72 60D-15 MF72 80D-15 MF72 120D-15	60 80 120	3 2 1.5	0.892 1.186 1.791	3200 3200 3200	330 330 330			

■ MF72 yD-20x

规格 Spec	零功率电阻 Zero power resistance (R25)	最大稳态电流 Maximum Current at 25°C (I max)	残余电阻 Residual Resistance at I _{max}	B 值 B-Value (25/85)	电容容量 Recommnd Capacitance (AC240V)	热时间常数 Thermal Time Constant	耗散系数 Dissipation Factor	工作温度 范围 Operaging temperature
	Ω	A	Ω		uF	s	mw/°C	°C
MF72 0.7D-20 MF72 1D-20 MF72 1.3D-20	0.7 1 1.3	11 10 9	0.112 0.118 0.142	2700 2700 2700	680 470 470	≤120	≥20	-40~+200
MF72 2.2D-20 MF72 2.5D-20 MF72 3D-20	2.2 2.5 3	8 8 8	0.137 0.153 0.161	2800 2800 2800	470 470 470			
MF72 4D-20 MF72 5D-20 MF72 6D-20	4 5 6	7 7 6	0.163 0.166 0.192	3000 3000 3000	680 680 680			
MF72 6.8D-20 MF72 7D-20 MF72 8D-20	6.8 7 8	6 6 6	0.201 0.203 0.208	3000 3000 3000	680 680 680			
MF72 10D-20 MF72 12D-20 MF72 15D-20	10 12 15	6 5 5	0.219 0.221 0.226	3000 3200 3200	680 680 680			
MF72 16D-20 MF72 18D-20 MF72 20D-20	16 18 20	5 4 4	0.231 0.256 0.281	3200 3200 3200	680 680 680			
MF72 30D-20 MF72 33D-20 MF72 50D-20	30 33 50	4 4 4	0.421 0.459 0.690	3200 3200 3200	680 680 680			
MF72 60D-20	60	4	0.822	3200	680			

浪涌电流抑制型NTC热敏电阻器
LIMITING INRUSH CURRENT TYPE NTC THERMISTORS

WEIDY®

■ MF72 yD-25x

规格 Spec	零功率电阻 Zero power resistance (R25)	最大稳态电流 Maximum Current at 25°C (I max)	残余电阻 Residual Resistance at I _{max}	B 值 B-Value (25/85)	电容容量 Recommend Capacitance (AC240V)	热时间常数 Thermal Time Constant	耗散系数 Dissipation Factor	工作温度 范围 Operaging temperature
	Ω	A	Ω		uF	s	mw/°C	°C
MF72 0.5D-25 MF72 0.7D-25 MF72 1D-25	0.5 0.7 1	12 12 11	0.048 0.063 0.089	2700 2700 2700	680 680 820	≤160	≥27	-40~+200
MF72 1.3D-25 MF72 1.5D-25 MF72 2.2D-25	1.3 1.5 2.2	10 10 9	0.112 0.131 0.141	2700 2700 2800	820 820 820			
MF72 2.5D-25 MF72 3D-25 MF72 4D-25	2.5 3 4	9 9 8	0.143 0.169 0.167	2800 3000 3000	820 820 820			
MF72 5D-25 MF72 6D-25 MF72 7D-25	5 6 7	8 7 7	0.166 0.182 0.201	3000 3000 3000	820 820 820			
MF72 8D-25 MF72 10D-25 MF72 12D-25	8 10 12	7 7 6	0.212 0.266 0.322	3300 3300 3300	820 820 680			
MF72 15D-25	15	6	0.396	3300	680			