

金屬皮膜電阻器

PRECISION METAL FILM RESISTORS

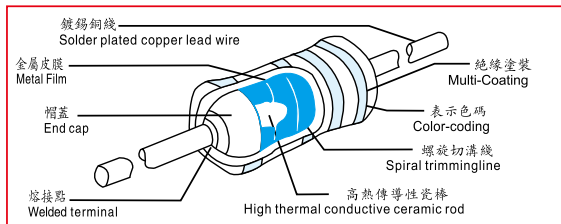
MF

製品介紹 INTRODUCTION

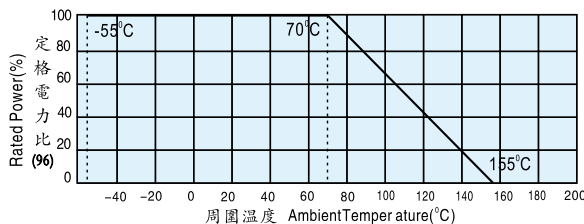
MF 金屬皮膜電阻器屬於高性能之精密電阻器，適用於精密電子回路。

MF, Metal film resistor, is a precise and functional resistor. It is suitable for applications on precise electronic circuits.

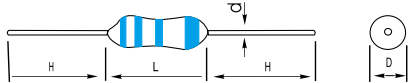
構造 CONSTRUCTION



負荷輕減曲線 DERATING CURVE



形狀 STYLE



尺寸 DIMENSIONS

形名	尺寸 Dimensions (mm)				額定功率	最高工作電壓	最高過負荷電壓	耐電壓	電阻值範圍	
TYPE	L	D	d	H	Power Rating	Max Working Voltage	Max Overload Voltage	Dielectric Withstanding Voltage	Resistance Range	
普通型 Normal size	MF1/6W	3.2±0.2	1.8±0.2	0.40±0.02	25±3	0.16W	200V	400V	300V	0.1Ω~22M
	MF1/4W	6.5±0.5	2.3±0.3	0.43±0.02	25±3	0.25W	250V	500V	500V	0.1Ω~22M
	MF1/2W	9.0±1.0	3.2±0.5	0.50±0.02	25±3	0.5W	350V	700V	500V	0.1Ω~22M
	MF1W	12.0±1.0	4.5±0.5	0.65±0.02	25±3	1W	400V	800V	500V	0.1Ω~22M
	MF2W	15.5±1.0	5.0±1.0	0.72±0.02	23±3	2W	500V	1000V	500V	0.1Ω~22M
	MF3W	17.5±1.0	6.0±1.0	0.72±0.02	27±3	3W	750V	1200V	600V	0.1Ω~22M
小型化 Small size	MF5W	24.5±1.0	8.5±1.0	0.75±0.02	27±3	5W	900V	1400V	750V	0.1Ω~22M
	MF1/4WS	3.2±0.2	1.8±0.2	0.40±0.02	25±3	0.25W	200V	400V	300V	0.1Ω~22M
	MF1/2WS	6.5±0.5	2.3±0.3	0.43±0.02	25±3	0.5W	250V	500V	500V	0.1Ω~22M
	MF1WS	9.0±1.0	3.2±0.5	0.50±0.02	25±3	1W	350V	700V	500V	0.1Ω~22M
	MF2WS	12.0±1.0	4.5±0.5	0.65±0.02	25±3	2W	400V	800V	700V	0.1Ω~22M
	MF3WS	15.5±1.0	5.0±1.0	0.72±0.02	23±3	3W	500V	1000V	700V	0.1Ω~22M
超小型化 Super Mini-Size	MF5WS	17.0±1.0	6.0±1.0	0.72±0.02	27±3	5W	750V	1200V	700V	0.1Ω~22M
	MF1/2W(SS)	3.2±0.2	1.8±0.2	0.40±0.02	25±3	0.5W	250V	500V	500V	0.1Ω~1M
	MF1W(SS)	6.5±0.5	2.3±0.32	0.43±0.02	25±3	1W	350V	700V	500V	0.1Ω~1M
	MF2W(SS)	9.0±1.0	3.2±0.5	0.50±0.02	25±3	2W	400V	800V	500V	0.1Ω~1M
	MF3W(SS)	12.0±1.0	4.5±0.5	0.65±0.02	25±3	3W	500V	1000V	500V	0.1Ω~1M
	MF5W(SS)	15.5±1.0	5.0±1.0	0.72±0.02	27±3	5W	750V	1200V	600V	0.1Ω~1M
MF0.6W	6.5±0.5	2.3±0.3	0.43±0.02	25±3	0.6W	250V	500V	500V	0.1Ω~22M	

NOTE: Specification can be constructed on request.

特長 FEATURES

- 高安定性 High stability
- 低雜音・低溫度係數 Low noise. Low temp. coefficient
- 精密特性 Precision characteristics



特性 CHARACTERISTICS

試驗項目 Test Items	規格值 Specified Value
溫度係數 Temp. coefficient of resistance	±50, ±100PPM/°C
短時間過負荷 Short time overload	±(0.5%+0.05Ω)
耐電壓 Dielectric withstanding voltage	無損壞的異狀 No evidence of damage
絕緣抵抗 Insulation resistance	Over 10 ¹¹ MΩ
端子強度 Terminal strength	無損壞的異狀 No evidence of damage
耐久性(耐濕負荷) Moisture load life	±(1.5%+0.05Ω)
耐久性(定格負荷)70°C Load life at 70°C	±(2%+0.05Ω)
溫度循環 Temperature cycling	±(1%+0.05Ω)
焊錫耐熱性 Resistance to soldering heat	±(0.5%+0.05Ω)
焊錫附著性 Resistance to soldering heat	Over 95%
耐溶劑性 Resistance to solvent	無損壞的異狀 No evidence of damage

金屬皮膜電阻器

PRECISION METAL FILM RESISTORS

MF

TOL : ±0.02%、±0.05%、±0.1%、0.25%、±1%

TC : ±5PPM、±10MMM、±15PPM、±25PPM、±50PPM

TYPE		MF1/8	MF1/4	MF1/2	MF1W	MF2W	型號	
MIL-R-10509F		RN50	RN55	RN60	RN65071	RN70	美國標準 MIL-R-10509F	
DIN-44061		0204	0207	0411	0617	0719	西德工業標準 DIN-44061	
POWER	70°C	0.125	0.250	0.500	0.75	1.00	70°C	額定功率 (W)
RATING	100°C	0.067	0.110	0.173	0.350	0.610	100°C	
(W)	125°C	0.050	0.100	0.125	0.250	0.500	1250C	
MAX.WORKING VOLTAGE(V)		200	250	300	350	400	最大工作電壓 (V)	

STANDARD RESISTANCE RANGE (Ω)

标准组值范围

TYPE		MF1/8	MF1/4	MF1/2	MF1W	MF2W	型號	
P(±0.02%)	from		5	5	10	10	由	(±0.02%)-P
	to		1M21	1M21	2M	2M	到	
W(±0.05%)	from	100	5	5	10	10	由	(±0.05%)-W
	to	100k	1M21	1M5	2M	2M	到	
B(±0.1%)	from	10	1	1	1	1	由	(±0.10%)-B
	to	500k	1M5	2M5	5M	10M	到	
C(±0.25%)	from	10	1	1	1	1	由	(±0.25%)-C
	to	600k	2M5	5M	10M	10M	到	
D(±0.50%)	from	10	1	1	1	1	由	(±0.50%)-D
	to	800k	5M	10M	10M	10M	到	
F(±1.00%)	from	10	1	1	1	1	由	(±1.00%)-F
	to	1M	10M	10M	10M	10M	到	
C7(±5ppm/°C)	from	10	10	10	10	10	由	(±5ppm/°C)-C7
	to	1M	1M	1M	1M	1M	到	
C6(±10ppm/°C)	from	100	10	10	10	10	由	(±10ppm/°C)-C6
	to	100k	1M5	1M5	1M5	1M5	到	
C5(±15ppm/°C)	from	100	5	5	5	5	由	(±15ppm/°C)-C5
	to	200k	1M5	1M5	1M5	1M5	到	
C3(±25ppm/°C)	from	10	5	5	5	5	由	(±25ppm/°C)-C3
	to	600k	2M5	2M5	2M5	2M5	到	
C2(±50ppm/°C)	from	10	5	5	5	5	由	(±50ppm/°C)-C2
	to	1M	10M	10M	10M	10M	到	

訂貨方式 HOW TO ORDER

MF	1/4W	T52	J	10K
種類 Type	預定電力 Power Rating	形狀/包裝方式 Form/ Packaging	電阻值誤差率 Resistance Tolerance	公稱電阻值 Nominal Resistance
	Normal Size Small Size	S.P Bulk (Straight)	J ±5%	3-Digit: E-24, 12 Series
	1/6W 1/4WS	M Bulk, M-Form series (Horizontal Forming)	K ±10%	e.g. OR12 = 0.12Ω
	1/4W 1/2WS	U Buld, U-Form series (Vertical Forming)	M ±20%	120R = 120Ω
	1/2W 1WS	Txx Boxed (26.52.63.73.83mm width taping)	F ±1%	1K2 = 1.2KΩ
	1W 2WS	T/R Tape on reel packing	D ±0.5%	12K = 12KΩ
	2W 3WS	U/T Radial Taping	C ±0.25%	12M = 12MΩ
			B ±0.1%	