

金屬皮膜電阻器

PRECISION METAL FILM RESISTORS

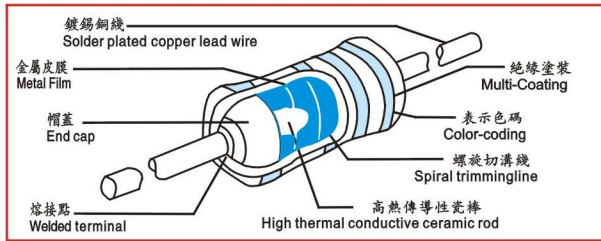
MF

製品介紹 INTRODUCTION

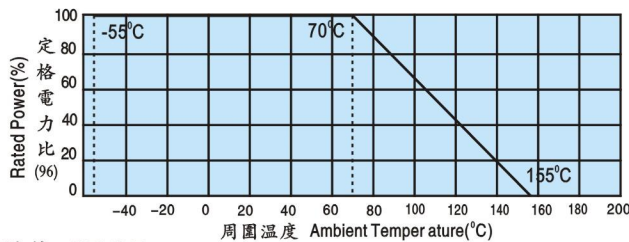
MF 金屬皮膜電阻器屬於高性能之精密電阻器，適用於精密電子回路。

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

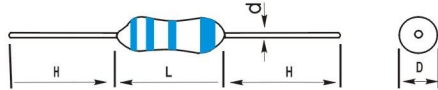
構造 CONSTRUCTION



負荷輕減曲線 DERATING CURVE



形狀 STYLE



尺寸 DIMENSIONS

形名	尺寸 Dimensions (mm)				額定功率 Power Rating	最高工作電壓 Max Working Voltage	最高過負荷電壓 Max Overload Voltage	耐電壓 Dielectric Withstanding Voltage	電阻值範圍 Resistance Range	
	TYPE	L	D	d						H
普通型 Normal Size	MF1/6W	3.2±0.2	1.8±0.2	0.40±0.02	25±3	0.16W	200V	300V	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	500V	1000V	500V	0.1Ω~22M
	MF2W	15.5±1.0	5.0±1.0	0.72±0.02	27±3	2W	500V	1000V	500V	0.1Ω~22M
	MF3W	17.5±1.0	6.0±1.0	0.72±0.02	27±3	3W	500V	1000V	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	700V	1000V	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	500V	1000V	700V	0.1Ω~22M
	MF3WS	15.5±1.0	5.0±1.0	0.72±0.02	25±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	500V	1000V	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	500V	1000V	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	500V	1000V	600V	0.1Ω~1M	

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, ±100 PPM/°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 ¹⁰ 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 RESISTOR

MF

TOL : ±0.02%、±0.05%、±0.1%、0.25%、±1%

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

TYPE		MF1/8	MF1/4	MF 1/2	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(±0.010%)	from	10	1	1	1	1	由	(±0.010%)-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		電阻值誤差率 Resistance Tolerance		公稱電阻值 Nominal Resistance	
	Nomal Size	Small Size	J	±5%	3-Digit: E-24, 12 Series	
	1/6W	1/4WS	K	±10%	e.g. OR12 = 0.12Ω	
	1/4W	1/2WS	M	±20%	120R = 120Ω	
	1/2W	1WS	F	±1%	1K2 = 1.2KΩ	
	1W	2WS	D	±0.5%	12K = 12KΩ	
	2W	3WS	C	±0.25%	12M = 12MΩ	
			B	±0.1%		
	形狀/包裝方式 Form/ Packaging					
	S.P Bulk (Straight)					
	M Bulk, M-Form series (Horizontal Forming)					
	U Buld, U-Form series (Vertical Forming)					
	Txx Boxed (26.52.63.73.83mm width taping)					
	T/R Tape on reel packing					
	U/T Radial Taping					