



Resistors & Potentiometers

1/8W Metal Film Resistors

Detailed product specifications are available on: us.100y.com.tw

CHARACTERISTICS

CHARACTERISTIC	SPECIFICATION	TEST METHOD
SHORT TIME OVERLOAD	ΔR with in $\pm(0.05\%+0.05\%)$	MIL-R-10509
HUMIDITY	ΔR with in $\pm(1\%+0.05\%)$ No mechanical damage	MIL-STD-202 Method 103
LOW TEMPERATURE OPERATION	ΔR with in $\pm(0.5\%+0.05\%)$	MIL-R-10509
LOAD LIFE	ΔR with in $\pm(1\%+0.05\%)$	MIL-STD-202 Method 108
RESISTANCE TO SOLVENT	Color bands legible No mechanical damage	MIL-STD-202 Method 215

Part No.	Product No.	Description	Tolerance(+/-)	Power W	Resistance data(Ω)
24642	RM08062FT	Metal Film Resistor	+/-1%	1/8W	62 ohm
29468	RM081K00FT	Metal Film Resistor	+/-1%	1/8W	1K Ω
13060	RM83006FT	Metal Film Resistor	+/-1%	1/8W	300K ohm

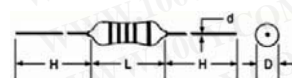
1/4W Metal Film Resistors

Detailed product specifications are available on: us.100y.com.tw



FEATURES

- Meet american military specification MIL-R-10509F1
- Very low current noise!
- Broad selection of temperature coefficient: $\pm 100\text{ppm}$, $\pm 50\text{ppm}$, $\pm 25\text{ppm}$, $\pm 15\text{ppm}$, $\pm 10\text{ppm}$
- Tolerance available: $\pm 5\%$, $\pm 2\%$, $\pm 1\%$, $\pm 0.5\%$, $\pm 0.25\%$, $\pm 0.1\%$, $\pm 0.05\%$, $\pm 0.01\%$
- Voltage available: 1/16W, 1/8W, 1/6W, 1/4W, 0.4W, 1/2W, 0.6W, 1W, 2W, 3W
- Major applications are switching power supplies, communication equipments, monitors, testing meters



INTRODUCTION

MF

To fill the function gap of carbon film resistors, metal oxide film resistors or wirewound resistors SYNTECH makes metal film resistors. The resistive element is a high content of Al₂O₃ ceramic rod on which a thin film of Ni/Cr alloy is deposited by vacuum sputtering system. Then contact caps are pressed onto the ends of the rod and a helical groove cut through the film to give the required resistance value. Connecting copper wire are welded to the end caps. Finally the resistors are coated with multiple layers of insulation lacquer. SYNTECH's MF series are suitable for all circuit applications especially tighter tolerance and low temperature coefficient are required.

SPECIFICATIONS

TYPE	POWER RATING @ 70°C	DIMENSIONS (mm)				MAXIMUM WORKING VOLTAGE	MAXIMUM OVERLOAD VOLTAGE	RESISTANCE RANGE
		L	D	H	d			
MF-25S	1/4W	3.5 \pm 0.3	1.8 \pm 0.3	25 \pm 3	0.45 \pm 0.05	250V	500V	*Standard 10 Ω ~1Meg Ω *Special low to 0.1 Ω high to 30Meg Ω

Part No.	Product No.	Manufacturer	Description	Resistance data(Ω)	Tolerance(+/-)	Power W
17024	MF-25-23.3 Ω	SYNTECH	Metal Film Resistor	23.3 ohm	+/-1%	1/4W
17025	MF-25-33.2 Ω	SYNTECH	Metal Film Resistor	33.2 ohm	+/-1%	1/4W



INTRODUCTION

MF series is a group of metal film resistors applying high Aluminum content base material vacuum sputtered by Ni-Cr alloy and excellent heat-and wet-proof special resin for protective coating. Those resistors are manufactured through integrated automatic production system and then have good stable and uniform property. Furthermore, they show excellent performance regardless open in air.

FEATURES

- High stability.
- Low noise, Low temperature coefficient.
- Precision characteristics.
- Variety of packaging-bulk, and taped, cut and formed supplied.



SPECIFICATION

TYPE	MAXIMUM WORKING VOLTAGE	MAXIMUM OVERLOAD VOLTAGE	RESISTANCE RANGE		TYPE		DIMENSION(mm)			
			$\pm 1\%$ (F)	$\pm 0.5\%$ (D)	MF	MFS	L ± 1	D ± 0.5	H ± 3	d ± 0.05
1/4W/1/4W	250V	500V	10R~1M	10R~1M	1/4W	1/2W	6.3	2.4	28	0.56

DIMENSION

CHARACTERISTICS

CHARACTERISTIC	SPECIFICATION	TEST METHOD
DC RESISTANCE	Within specified tolerance	MIL-STD-202 Method 303
TEMPERATURE COEFFICIENT	As buyer requested $\pm 10\text{ppm}/^\circ\text{C}$ $\pm 50\text{ppm}/^\circ\text{C}$ $\pm 10\text{ppm}/^\circ\text{C}$ $\pm 50\text{ppm}/^\circ\text{C}$	MIL-STD-202 Method 304
DIELECTRIC STRENGTH	No flashover or damage	MIL-STD-202 Method 301
INSULATION RESISTANCE	At least 1,000M Ω	MIL-STD-202 Method 302
CURRENT NOISE TEST	below 10K; below 0.05 μ V/V 10K;~below 0.1 μ V/V below 1M7 below 0.2 μ V/V	MIL-STD-202 Method 308
VIBRATION	ΔR with in $\pm(0.25\%+0.05\%)$	MIL-STD-202 Method 201
TERMINAL STRENGTH	Lead is not break or loose	MIL-STD-202 Method 211
RESISTANCE TO SOLDERING HEAT	ΔR with in $\pm(0.25\%+0.05\%)$	MIL-STD-202 Method 210
LOAD LIFE	ΔR with in $\pm(1\%+0.05\%)$	MIL-STD-202 Method 108
RESISTANCE TO SOLVENT	Color bands legible No mechanical damage	MIL-STD-202 Method 215

