# **HIGH VOLTAGE RESISTOR**

# MFH TYPE

## INTRODUCTION

MFH Type resistors are suitable for high voltage and high impedance applications where high resistance and stability are required.

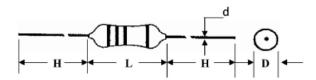
Consistent quality and reliability is achieved by thick film construction on high—grade ceramic core.

Multilayer epoxy coating offers exceptional environmental protection.

MFH resistors are particularly suited in voltage dividers, X-ray equipment, and high voltage power supplies.

## **FEATURES**

- Resistance value can be high as 100M Ω
- Metal glaze elements provide high stable performance against environmental conditions and overload
- Resistant to heat, humidity & solvents
- Tolerance available: ±5%, ±1%

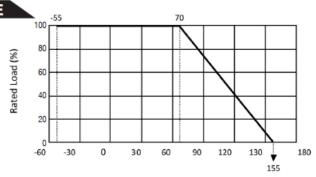


#### **DIMENSIONS**

Unit: mm

TYPE	POWER RATING	L	D	Н	d	MAX. WORKING VOLTAGE	PULSE VOLTAGE	RESISTANCE VALUE
MFH-25	1/4W	6.5±0.5	2.5±0.5	25±3	0.55±0.1	1600V	3KV∼6KV	10Ω∼100M
MFH-50S	1/2W	0.5±0.5						
MFH-50	1/2W	0.5 + 0.5	3.5±0.5	25±3	0.65±0.1	3500V	4KV~8KV	
MFH-100S	1W	9.5±0.5						
MFH-100	1W	44 1 4 7	4.5±0.5	35±3	0.75±0.1	7000V	5KV~9KV	
MFH-200S	2W	11±1.5						
MFH-200	2W	15±1.5	5.0±0.5	35±3	0.75±0.1	10000V	8KV~10KV	

#### **DERATING CURVE**



#### Ambient Temperature (°C)

#### **CHARACTERISTICS**

TEST	TEST METHOD	LIMITS		
SHORT-TIME OVERLOAD	2.5 times of rated voltage for 5 sec.	±1.0%		
LOAD LIFE TEST	70°C on-off cycle 1,000 hours	±5.0%		
TEMPERATURE CYCLE	-65°C, 25°C, 150°C, 25°C, 5 cycles	±1.0%		
TEMPERATURE COEFFICIENT	-65°C ~ +175°C	<1K=±500PPM/C, ≤100K=±300PPM/C, >100K=±200PPM/C		
INSULATION RESISTANCE	DC.500V V Block 1 minute	1,000MΩmin.		
DIELECTRIC WITHSTANDING	350V AC 1min.	No Change		
MOISTURE RESISTANCE	10 cycles per MIL-STD-202 Method 106	±5.0%		
LOW TEMP. OPER.	-65°C Rated Voltage 45 minutes	0.5%		
RESISTANCE TO SOLDERING HEAT	260°C ±5°C/10±1 sec.	1%		