

# METAL OXIDE FILM RESISTOR

MO (FLAME-PROOF COATING TYPE)

NON (NON-INDUCTIVE TYPE)

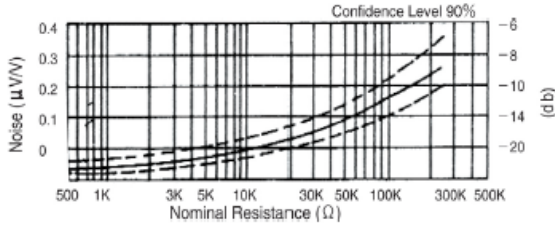
## INTRODUCTION

Liquid SnCl<sub>4</sub> heated to 400~700°C and sprayed on ceramic rod to make it a thin film on the surface of rod. Then SbCl<sub>3</sub> added to make it acid film. As the film is strong metal oxidized, it will last for years with very little change of resistance. SYNTON-TECH's MO series are especially suitable for the requirements of large load or high temperature operation.

## CHARACTERISTICS

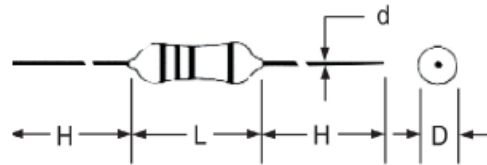
REQUIREMENTS	CHARACTERISTICS	TEST METHOD
TEMPERATURE COEFFICIENT	±350ppm	MIL-R-22684B, 4, 6, 11
INSULATION RESISTANCE	1,000MΩ Min.	MIL-R-22684B, 4, 6, 11
LOAD LIFE (1,000 HOURS)	±3% (70°C, 1000hrs)	MIL-R-22684B, 4, 6, 12
SHORT-TIME OVERLOAD	±(0.5%+0.05Ω)	MIL-R-22684B, 4, 6, 5
TEMPERATURE CYCLING	±(1%+0.05Ω)	MIL-R-22684B, 4, 6, 3
MOISTURE RESISTANCE	±(1%+0.05Ω)	MIL-R-22684B, 4, 6, 10
SHOCK AND VIBRATION	±(0.2%+0.05Ω)	MIL-R-22684B, 4, 6, 14
SOLDERING HEAT	±(0.5%+0.05Ω)	MIL-R-22684B, 4, 6, 9
VOLTAGE COEFFICIENT	0.001%/V	
INCOMBUSTIBILITY	1~16 Times E=√PXR, 5 Min.	

## CURRENT NOISE

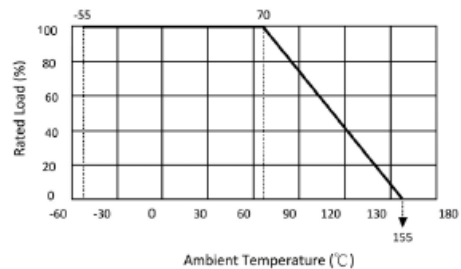


## FEATURES

- Excellent long-term stability and reliability!
- Met MIL-R-22684B requirements!
- Extremely low for annual shift!
- Excellent flame retardant coating with "freon" resistant performance!
- Can produce high resistance value to replace wire wound resistor with lower cost!
- Tolerance available : ±5%, ±2%, ±1%
- Voltage available : 1/8W, 1/4W, 1/2W, 1W, 2W, 3W, 4W, 5W, 7W, 10W
- Based on application concerns, MO rods can be replaced by CR or MF rods.



## DERATING CURVE



## SPECIFICATIONS

TYPE	POWER RATING @ 70°C	DIMENSIONS (mm)				MAXIMUM WORKING VOLTAGE	MAXIMUM OVERLOAD VOLTAGE	RESISTANCE RANGE
		L	D	H	d			
MO-12	1/8W	3.5±0.3	1.8±0.3	25±3	0.43±0.05	200V	400V	*STANDARD 1Ω~56KΩ
MO-25S	1/4W					250V	500V	
MO-25	1/4W	6.0±0.5	2.3±0.3	25±3	0.54±0.1	250V	500V	
MO-50S	1/2W					350V	700V	
MO-50	1/2W	9.0±0.5	3.2±0.5	25±3	0.58±0.1	350V	700V	
MO-100S	1W							
MO-100	1W	11.0±1.0	4.5±0.5	35±3	0.75±0.1	350V	700V	
MO-200S	2W							
MO-200	2W	15.0±1.0	5.0±0.5	35±3	0.75±0.1	350V	700V	
MO-300S	3W					500V	800V	
MO-300	3W	17.0±1.0	6.0±0.5	35±3	0.75±0.1	500V	800V	
MO-300B	3W	24.0±1.0	8.0±1.0	35±3	0.75±0.1	500V	800V	
MO-400	4W	17.0±1.0	6.0±0.5	35±3	0.75±0.1	500V	800V	
MO-500S	5W	17.0±1.0	6.0±0.5	35±3	0.75±0.1	750V	1000V	
MO-500	5W	24.0±1.0	8.0±1.0	35±3	0.75±0.1	750V	1000V	
MO-500B	5W	39.0±3.0	8.0±1.0	28±3	0.75±0.1	750V	1000V	
MO-700	7W	39.0±3.0	8.0±1.0	28±3	0.75±0.1	750V	1000V	
MO-700B	7W	52.0±3.0	8.0±1.0	35±3	0.75±0.1	750V	1000V	
MO-1000	10W	52.0±3.0	8.0±1.0	35±3	0.75±0.1	750V	1000V	
MO-1000S	10W	39.0±3.0	8.0±1.0	28±3	0.75±0.1	750V	1000V	