







Wiring Diagram



V = Voltage L = Load R = Red Wire

B = Black Wire

Description

The MSM Series replaces bi-metal type timing with reliable solid-state circuitry. There are no moving parts to arc or wear. It is a cost effective solution for OEM designers. It is available for printed circuit board mounting or surface mounting with a removable bracket and wire leads. The MSM Series offers immediate reset on removal of power.

Operation (Delay-on-Make)

The time delay begins upon application of input voltage. The output is de-energized before and during the time delay. At the end of the time delay, the output energizes and remains energized until input voltage is removed.

Reset: Removing input voltage resets the time delay and output.

Features & Benefits

FEATURES	BENEFITS	
Analog circuitry	Repeat Accuracy + / - 5%, Factory calibration + / - 15%	
Compact, low cost design	Allows flexiblility for OEM applications	
Long life	No moving parts to arc or wear	
Long life PCB or wire harness	No moving parts to arc or wear Offers design and installation flexibility	
Long life PCB or wire harness Immediate reset	No moving parts to arc or wear Offers design and installation flexibility Occurs on removal of power	

Ordering Information

MODEL	INPUT VOLTAGE	ADJUSTMENT	TIME DELAY	WIRE TYPE	WIRE LENGTH inches (mm)
MSM10.5W6	12VDC	Fixed	0.5s	Standard Lead	6.0 (152.4)
MSM10.7W6	12VDC	Fixed	0.7s	Standard Lead	6.0 (152.4)
MSM11W6	12VDC	Fixed	1s	Standard Lead	6.0 (152.4)
MSM110W6	12VDC	Fixed	10s	Standard Lead	6.0 (152.4)
MSM130W9	12VDC	Fixed	30s	Standard Lead	9.0 (228.6)
MSM190W6	12VDC	Fixed	90s	Standard Lead	6.0 (152.4)
MSM20.15W9	24VAC	Fixed	0.15s	Standard Lead	9.0 (228.6)
MSM210P3	24VAC	Fixed	10s	PC Mount	0.5 (12.7)
MSM25W9	24VAC	Fixed	5s	Standard Lead	9.0 (228.6)
MSM30.7W6	24VDC	Fixed	0.7s	Standard Lead	6.0 (152.4)
MSM42W6	120VAC	Fixed	2s	Standard Lead	6.0 (152.4)
MSM43W6	120VAC	Fixed	3s	Standard Lead	6.0 (152.4)
MSM420W6	120VAC	Fixed	20s	Standard Lead	6.0 (152.4)
MSM450W6	120VAC	Fixed	50s	Standard Lead	6.0 (152.4)

If you don't find the part you need, call us for a custom product 800-843-8848

MSM SERIES



Specifications

Time Delay

Type Range **Repeat Accuracy** Tolerance (Factory Calibration) **Recycle Time** Time Delay vs Temp. & Voltage Input Voltage Tolerance **AC Line Frequency** Output Type Form **Maximum Load Current**

Minimum Holding Current Voltage Drop Protection Circuitry Dielectric Breakdown Insulation Resistance Polarity Mechanical Mounting

Environmental

Operation/Storage Temperature Humidity Weight Analog Circuitry 0.05 - 180s fixed ±5%

±15% ≤ 75ms

±15%

12 or 24VDC; 24, 120, or 230VAC ±10% 50/60 Hz Solid State

NO, open during timing 0.5A steady state 25°C; 0.25A steady state 60°C 40mA

≅ 2.5V @ 0.5A

 $\begin{array}{l} \mbox{Encapsulated} \\ \geq 2000V \mbox{ RMS input to mounting surface} \\ \geq 100 \mbox{ M}\Omega \\ \mbox{DC units are reverse polarity protected} \end{array}$

- A.) PC mount 14 AWG (2.087mm²) wires (Can be inserted in AMP Miniature Spring Socket #645980-1)
- **B.)** Stranded 18 AWG wire leads (0.933 mm²) with mounting bracket

 $\begin{array}{l} -20^{\circ} \mbox{ to } 60^{\circ}\mbox{C} \ / \ -30^{\circ} \mbox{ to } 85^{\circ}\mbox{C} \\ 95\% \ \mbox{relative, non-condensing} \\ P: \ \simeq 1.1 \ \mbox{oz} \ (31.2 \ \mbox{g}) \quad W: \ \simeq 1.2 \ \mbox{oz} \ (34 \ \mbox{g}) \end{array}$

Function Diagram

