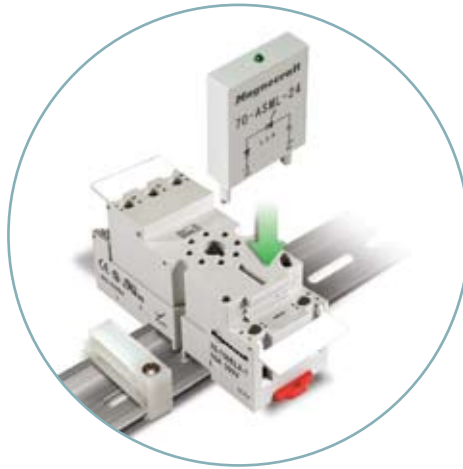


# Advantages of the 70-SM Module System

Magnecraft plug in modules are available in many variations allowing coverage for most applications on the market. The Metal Oxide Varistor (MOV) circuit protects by shunting potentially damaging electrical spikes away from the relay coil. The Resistor Capacitor (R/C) circuit snubs back Electro Motive Force (EMF) of relay coil. The Diode circuit protects external drive circuitry from inductive voltages generated when removing coil voltage. Finally, the Light Emitting Diode (LED) circuit is to quickly inform the user when power is present at the coil. All of the plug in modules connect their respective circuits in parallel with the relay coil. No additional wiring is required, and the modules fit within maximum dimensions of relay and socket.

### Diode Circuit

Protects External Drive Circuitry from Inductive Voltages Generated when Removing Coil Voltage. Polarity Sensitive.



### LED Circuit

LED Status Lamp Verifies that Power is Being Supplied to the Coil. Ideal for Both AC and DC Applications, Polarity Sensitive for DC Application.

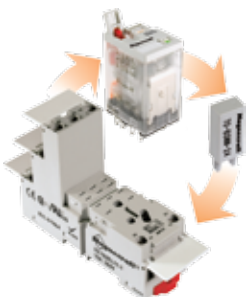


## The Complete System Solution!



### Modules

Plugging a module into a socket, connects the circuit in parallel with the relay coil. No additional wiring is required. No additional tools are required. The modules fit within the maximum dimensions of both the relay and socket.

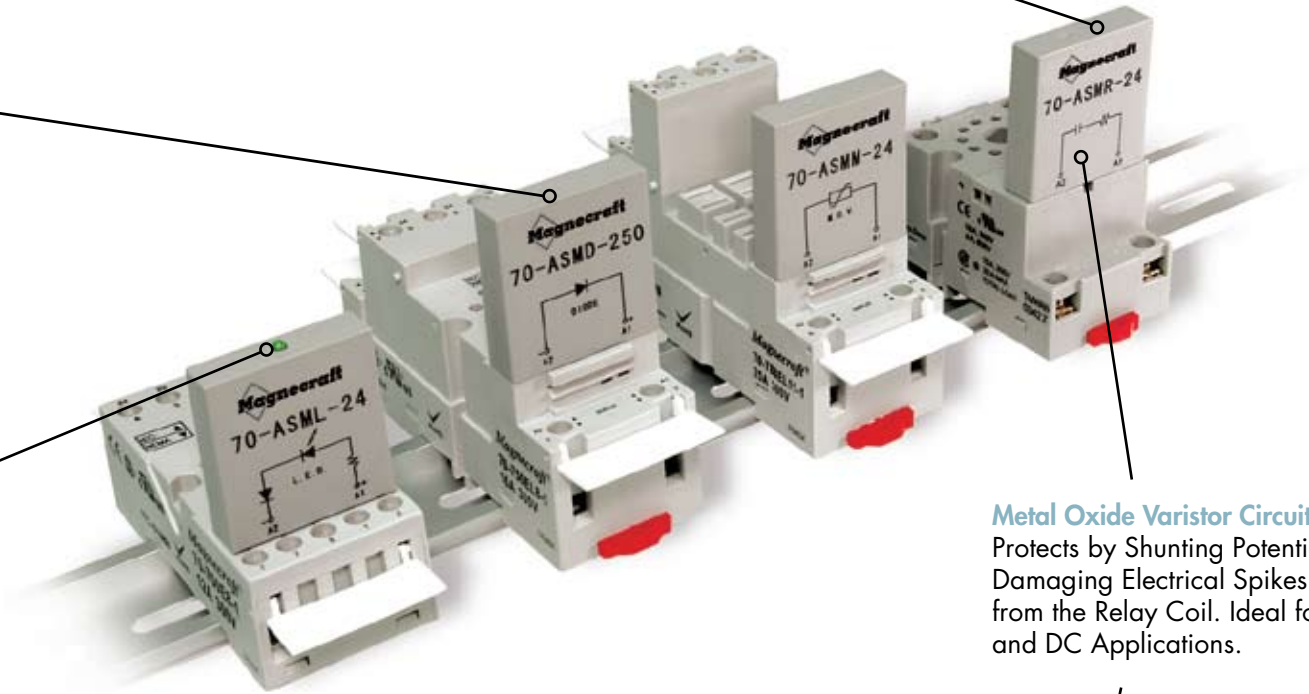


**RC Circuit**

Snubs Back EMF of Relay Coil.

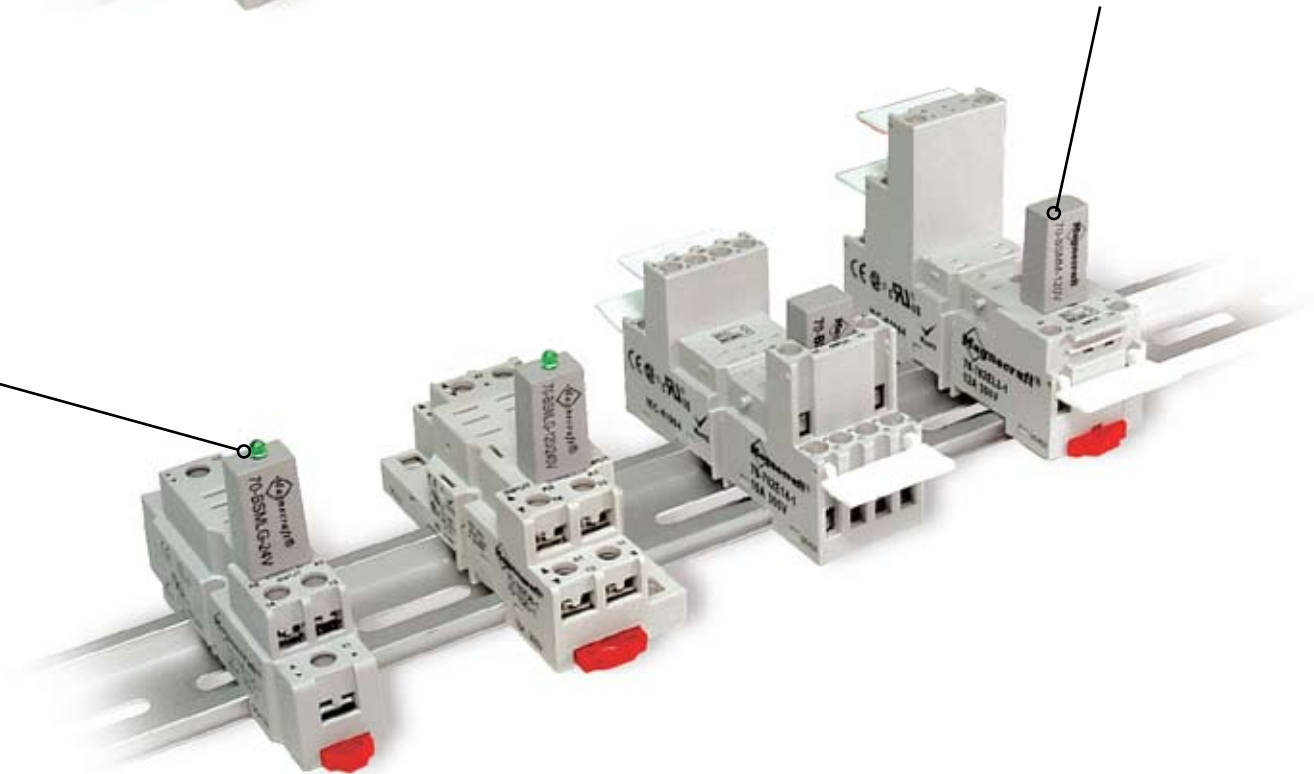
**Optimized Size**

No Wider than the Socket.



**Metal Oxide Varistor Circuit**

Protects by Shunting Potentially Damaging Electrical Spikes Away from the Relay Coil. Ideal for AC and DC Applications.



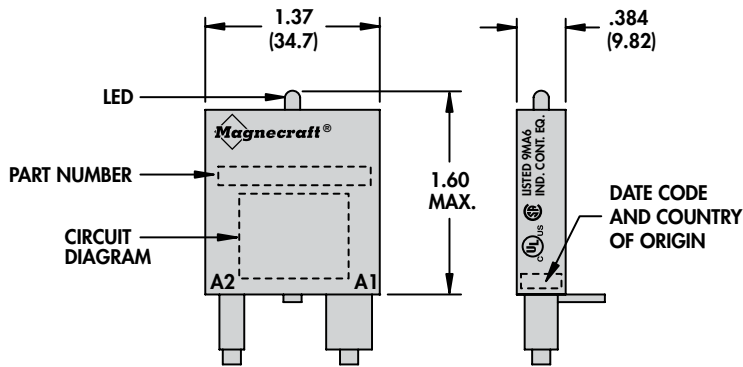
# 70-SM (A) Socket Modules

**The Complete System Solution!**

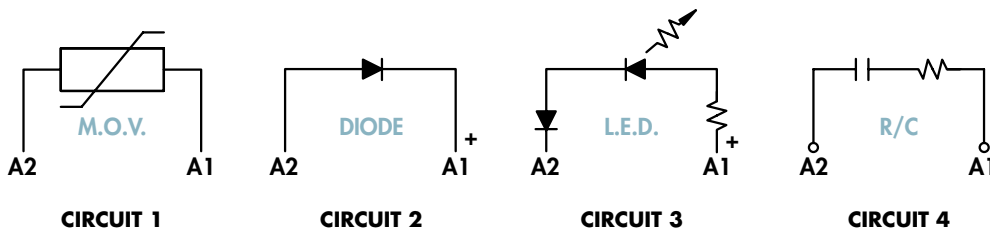


Characteristics	70-ASMD-250	70-ASMLG-24	70-ASMLG-120/240
Package Style	A	A	A
Function	Protection Diode	LED, Green	LED, Green
Input Voltage	6 - 250 VDC	24 VAC/VDC	120/240 VAC/VDC
Mating Sockets		70-783D11-1 (Sec. 2, p.10-11) 70-784D14-1 (Sec. 2, p.12-13) 70-750DL8-1 (Sec. 2, p.30-31) 70-750DL11-1 (Sec. 2, p.30-31) 70-750EL8-1 (Sec. 2, p.26-27) 70-750EL11-1 (Sec. 2, p.26-27) 70-750E8-1 (Sec. 2, p.28-29) 70-750E11-1 (Sec. 2, p.28-29) 70-788EL11-1 (Sec. 2, p.24-25)	

### PACKAGE - A



### WIRING DIAGRAMS





**BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED**

**70-ASMM-24**

A  
MOV Suppressor  
24 VAC/VDC

**70-ASMM-120**

A  
MOV Suppressor  
120/240 VAC/VDC

**70-ASMR-24**

A  
R/C Suppressor  
6 - 24 VAC/VDC

**70-ASMR-240**

A  
R/C Suppressor  
110/240 VAC/VDC

- 70-783D11-1 (Sec. 2, p.10-11)
- 70-784D14-1 (Sec. 2, p.12-13)
- 70-750DL8-1 (Sec. 2, p.30-31)
- 70-750DL11-1 (Sec. 2, p.30-31)
- 70-750EL8-1 (Sec. 2, p.26-27)
- 70-750EL11-1 (Sec. 2, p.26-27)
- 70-750E8-1 (Sec. 2, p.28-29)
- 70-750E11-1 (Sec. 2, p.28-29)
- 70-788EL11-1 (Sec. 2, p.24-25)

**Part Number Builder**

70-	A	SM	M	-24
Series	Package Style	Socket Module	Function	Input Voltage
Module Family	A		M=M.O.V. (Metal Oxide Varistor)	24
			R= Resistor/Capacitor	120
			D= Diode	240
			LG= LED, Green	250

**Metal Oxide Varistor Circuit**

Protects by Shunting Potentially Damaging Electrical Spikes Away from the Relay Coil. Ideal for AC and DC Applications.

**LED Circuit**

LED Status Lamp Verifies that Power is Being Supplied to the Coil. Ideal for Both AC and DC Applications, Polarity Sensitive for DC Application.

**RC Circuit**

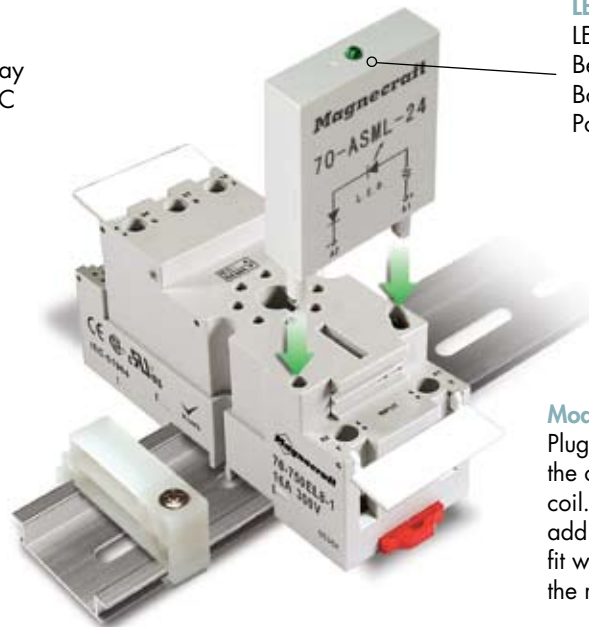
Snubs Back EMF of Relay Coil.

**Optimized Size**

No Wider than the Socket.

**Diode Circuit**

Protects External Drive Circuitry from Inductive Voltages Generated when Removing Coil Voltage. Ideal for DC Applications. Polarity Sensitive.



**Modules**

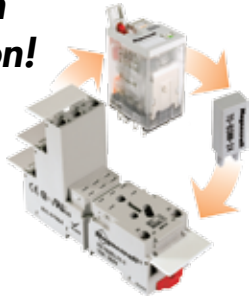
Plugging a module into a socket, connects the circuit in parallel with the relay and coil. No additional wiring is required. No additional tools are required. The modules fit within the maximum dimensions of both the relay and socket.

# 70-SM (B) Socket Modules

The Complete System Solution!



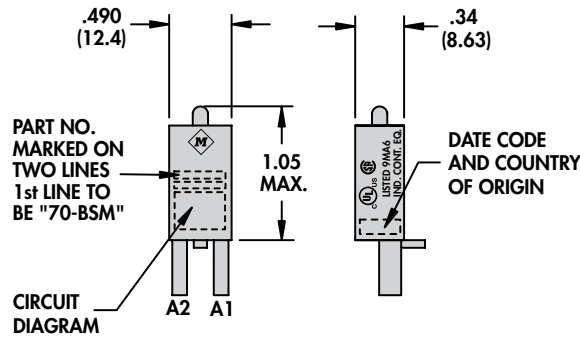
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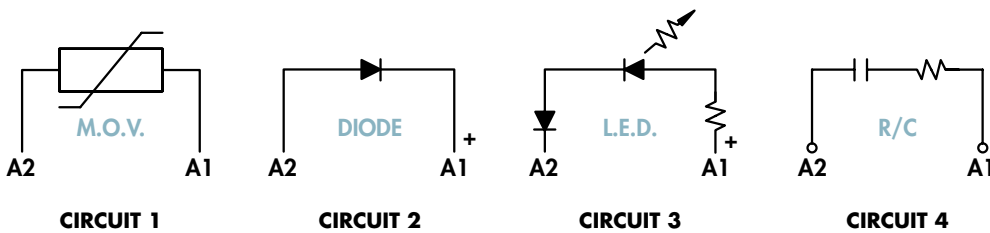
SECTION 3

Characteristics	70-BSMD-250	70-BSMLG-24
Package Style	B	B
Function	Protection Diode	LED Indicator
Input Voltage	6 - 250 VDC	24 VAC/VDC
Mating Sockets	70-781D5-1A (Sec. 2, p.6-7) 70-782D8-1 (Sec. 2, p.8-9) 70-782D14-1 (Sec. 2, p.22-23) 70-782E14-1 (Sec. 2, p.20-21) 70-782EL8-1 (Sec. 2, p.14-15) 70-782EL11-1 (Sec. 2, p.16-17) 70-782EL14-1 (Sec. 2, p.18-19)	

## PACKAGE - B



## WIRING DIAGRAMS





**BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED**

**70-BSMLG-120/240**

B  
LED Indicator  
120/240 VAC/VDC

**70-BSMM-24**

B  
MOV Suppressor  
24 VAC/VDC

**70-BSMM-120/240**

B  
MOV Suppressor  
120/240 VAC/VDC

- 70-781D5-1A (Sec. 2, p.6-7)
- 70-782D8-1 (Sec. 2, p.8-9)
- 70-782D14-1 (Sec. 2, p.22-23)
- 70-782E14-1 (Sec. 2, p.20-21)
- 70-782EL8-1 (Sec. 2, p.14-15)
- 70-782EL11-1 (Sec. 2, p.16-17)
- 70-782EL14-1 (Sec. 2, p.18-19)

**Part Number Builder**

70-	B	SM	M	-24
Series	Package Style	Socket Module	Function	Input Voltage
Module Family	B		M=M.O.V. (Metal Oxide Varistor)	24
			R= Resistor/Capacitor	120
			D= Diode	240
			LG= LED, Green	250

**Metal Oxide Varistor Circuit**

Protects by Shunting Potentially Damaging Electrical Spikes Away from the Relay Coil. Ideal for AC and DC Applications.

**LED Circuit**

LED Status Lamp Verifies that Power is Being Supplied to the Coil. Ideal for Both AC and DC Applications, Polarity Sensitive for DC Application.

**RC Circuit**

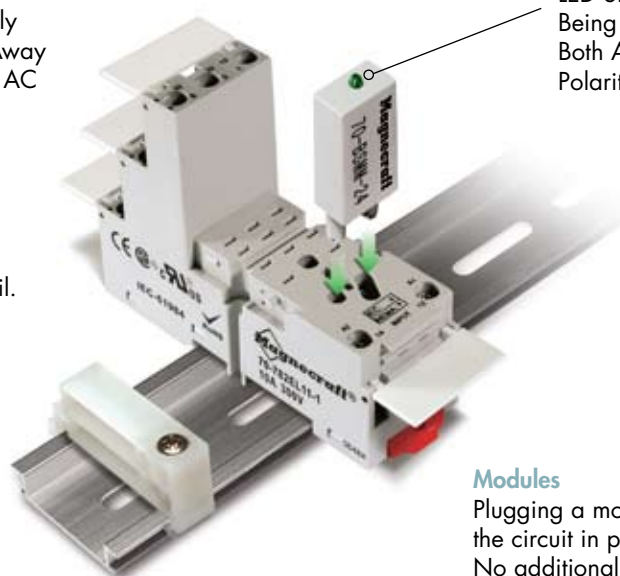
Snubs Back EMF of Relay Coil.

**Optimized Size**

No Wider than the Socket.

**Diode Circuit**

Protects External Drive Circuitry from Inductive Voltages Generated when Removing Coil Voltage. Ideal for DC Applications. Polarity Sensitive.



**Modules**

Plugging a module into a socket, connects the circuit in parallel with the relay and coil. No additional wiring is required. No additional tools are required. The modules fit within the maximum dimensions of both the relay and socket.