

RM Series — General Purpose Miniature Relays

Key features of the RM series include:

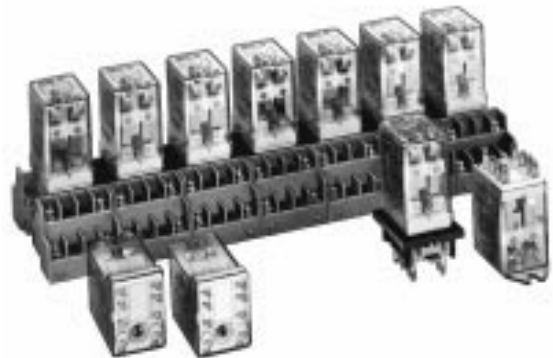
Compact miniature size saves space

High reliability and long service life

Choice of plug-in/solder or PCB type terminals

Options include models with indicator light, check button, and top mount bracket

DIN rail, surface, panel, and PCB type sockets available for a wide range of mounting applications



UL Recognized
Files No. E64245
E59804



File No. BL951113332319



CSA Certified
File No. LR35144

Specifications	Contact Material	Silver
	Contact Resistance	30mΩ maximum (initial value)
	Minimum Applicable Load	24V DC/10mA, 5V DC/20mA (reference value)
	Operating Time	20ms maximum
	Release Time	20ms maximum
	Power Consumption	AC: Approximately 1.2VA (60Hz); 1.4VA (50Hz) DC: Approximately 0.9W
	Insulation Resistance	100MΩ minimum (measured with 500V DC megger)
	Dielectric Strength	Between live and dead parts: 2,000V AC, 1 minute Between contact circuit and operating coil: 2,000V AC, 1 minute Between contact circuits: 2,000V AC, 1 minute (1,000V between NO-NC contacts)
	Frequency Response	1,800 operations/hour
	Temperature Rise	Coil: 85C maximum Contact: 65C maximum
	Vibration Resistance	0 to 6G (55Hz maximum)
	Shock Resistance	200N (approximately 20G)
	Life Expectancy	Electrical: over 500,000 operations (240V AC, 5A) Mechanical: over 50,000,000 operations
	Operating Temperature	-30 to +70C
Weight	35g (approximately)	

Operational Characteristics

Maximum Continuous Applied Voltage (AC/DC) at 20C	110% of the rated voltage
Minimum Operating Voltage (AC/DC) at 20C	80% of the rated voltage
Drop-Out Voltage (AC)	30% or more of the rated voltage
Drop-Out Voltage (DC)	10% or more of the rated voltage

Ordering Information

Order standard voltages for fastest delivery. Allow extra delivery time for non-standard voltages.

Basic Part No.

RM2S-U

Coil Voltage:

AC220-240V

Part Numbers

Part Numbers: RM Series with Options

Termination	Contact Configuration	Part No.	Indicator Light	Diode	Indicator Light and Diode	Top Bracket
S: Solder/ plug-in	DPDT	RM2S-U	RM2S-UL	RM2S-D	RM2S-LD	RM2S-UT
V: PCB, 0.031" (0.8mm) wide	DPDT	RM2V-U	RM2V-UL	RM2V-D	RM2V-LD	—

Part Numbers: Sockets

Relay	Standard DIN Rail Mount	Finger-Safe DIN Rail Mount	Panel Mount	PC Mount	Spring (optional)
RM2S	SM2S-05	SM2S-05C	SM2S-51	SM2S-61 SM2S-62	SY4S-51F1 SFA-101 SFA-202 SFA-302 SFA-301



also available with CHECK-BOTTOM Relays Part-Number + "C"

Ratings

Coil Ratings

Rated Voltage (V)	Rated Current ±15% at 20C			
	60Hz	50Hz	Coil Resistance ±10% at 20C	
AC	6	200mA	240mA	9.4Ω
	12	100mA	121mA	39.3Ω
	24	50mA	60.5mA	153Ω
	120*	11mA	13.1mA	4170Ω
	240 †	5.5mA	6.6mA	15210Ω
DC	6	150mA		40Ω
	12	75mA		160Ω
	24	36.9mA		650Ω
	48	18.5mA		2600Ω
	110 ‡	9.1mA		12100Ω

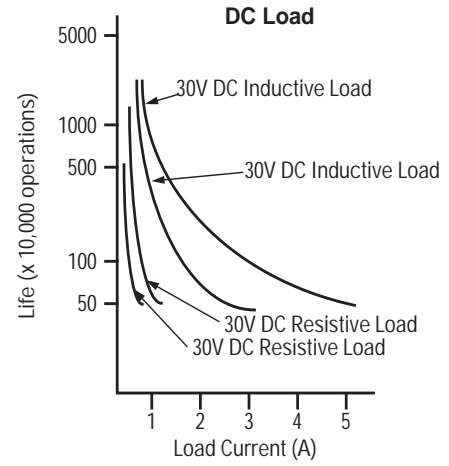
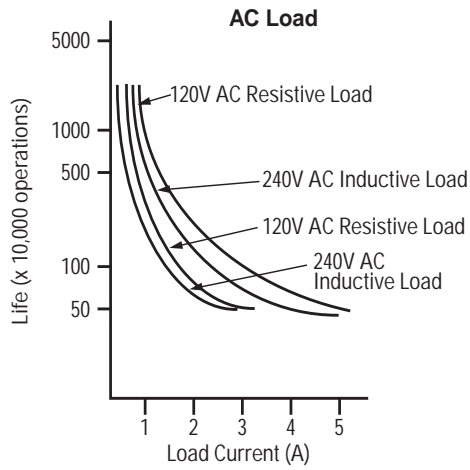


2. * For RM2 relays = 110/120V AC.
 † For RM2 relays = 220/240V AC.
 ‡ For RM2 relays = 100/110V DC.

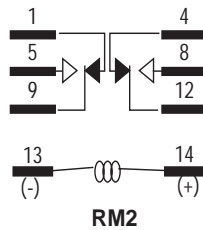
Contact Ratings

Voltage	Resistive			Inductive		
	Nominal	UL	CSA	Nominal	UL	CSA
30V DC	5A	5A	5A	2.5A	—	2.5A
110V DC	0.4A	0.4A	—	0.4A	—	0.4A
120V AC	5A	5A	5A	2.5A	2.5A	2.5A
240V AC	5A	5A	5A	2A	2A	2A

Electrical Life Curves



Internal Circuit



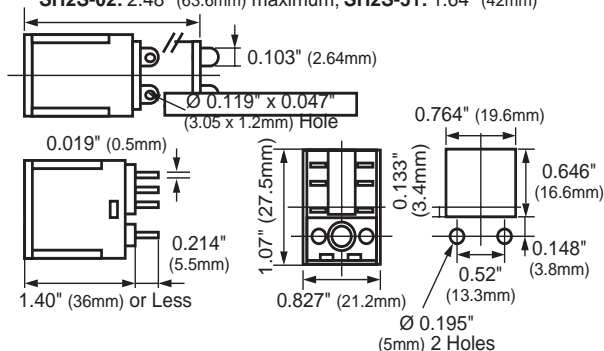
Dimensions, continued

RM Series

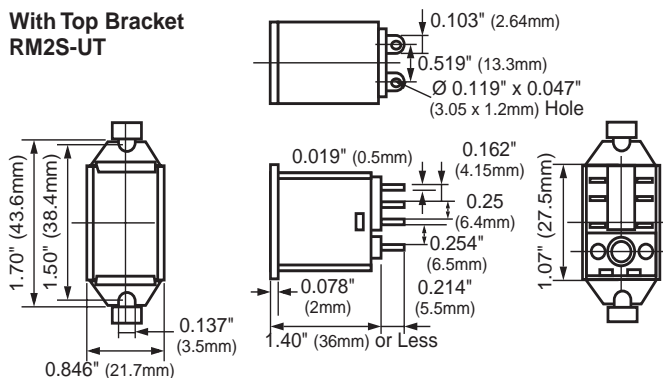
Solder Terminal

Plug-in RM2S

Total length from panel surface including socket:
SH2S-02: 2.40" (61.6mm) maximum; **SH2S-51:** 1.56" (40mm)
 Total length from panel surface including hold-down spring:
SH2S-02: 2.48" (63.6mm) maximum; **SH2S-51:** 1.64" (42mm)



With Top Bracket RM2S-UT



PCB Terminal RM2S, RM2V

