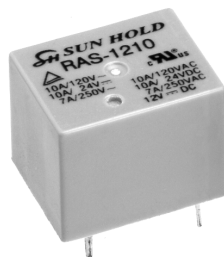
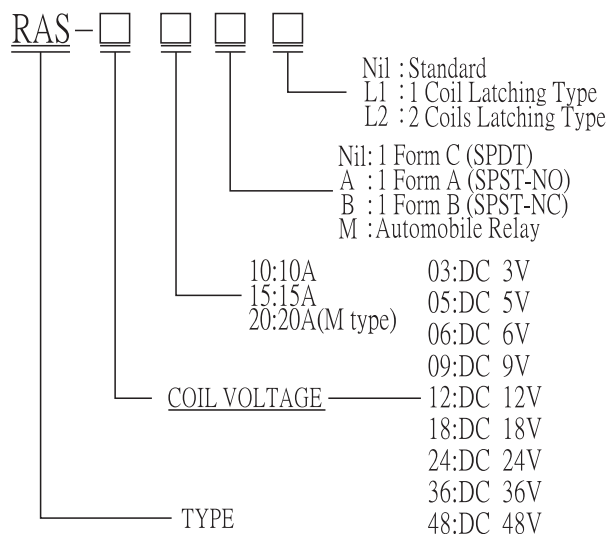


RAS SERIES

ORDERING INFORMATION



FEATURES:

- UL, CUL & TUV safety approval.
- Heavy current up to 15 amps available, and special 20 amps for automobile industry.
- Epoxy seal type and flux free.
- Satisfying all requirements for car use and household electronic appliances.
- RoHS 2011/65/EU compliant

COIL RATING(at 20°C)

NOMINAL VOLTAGE (VDC)	COIL RESISTANCE (Ω)(±10%)	POWER CONSUMPT -ION(W)	NOMINAL CURRENT (mA)(±10%)	PULL IN VOLTAGE (VDC)	DROP OUT VOLTAGE (VDC)	MAX. ALLOWABLE VOLTAGE (VDC)
3V	25 Ω	0.36W	120mA	75% MAX.	10% MIN.	130%
5V	69 Ω		72mA			
6V	100 Ω		60mA			
9V	225 Ω		40mA			
12V	400 Ω		30mA			
18V	900 Ω		20mA			
24V	1600 Ω		15mA			
36V	3600 Ω		10mA			
48V	4500 Ω	0.51W	10.6mA			
12V (M type)	225 Ω	0.64W	53.3mA	65%	8%	110%

	NOMINAL VOLTAGE (VDC)	COIL RESISTANCE (Ω)(±10%)	POWER CONSUMPT -ION(W)	NOMINAL CURRENT (mA)(±10%)	SET/RESET VOLTAGE (VDC)	MAX. ALLOWABLE VOLTAGE (VDC)
L1	5V	69 Ω	0.36W	72mA	75% MAX.	130%
	6V	100 Ω		60mA		
	9V	225 Ω		40mA		
	12V	400 Ω		30mA		
	18V	900 Ω		20mA		
	24V	1600 Ω		15mA		

	NOMINAL VOLTAGE (VDC)	COIL RESISTANCE (Ω)(±10%)	POWER CONSUMPT -ION(W)	NOMINAL CURRENT (mA)(±10%)	SET/RESET VOLTAGE (VDC)	MAX. ALLOWABLE VOLTAGE (VDC)
L2	5V	55 Ω	0.45W	90mA	75% MAX.	130%
	6V	80 Ω		75mA		
	9V	180 Ω		50mA		
	12V	320 Ω		37.5mA		
	18V	720 Ω		25mA		
	24V	1280 Ω		18.8mA		

PERFORMANCE(at initial value)

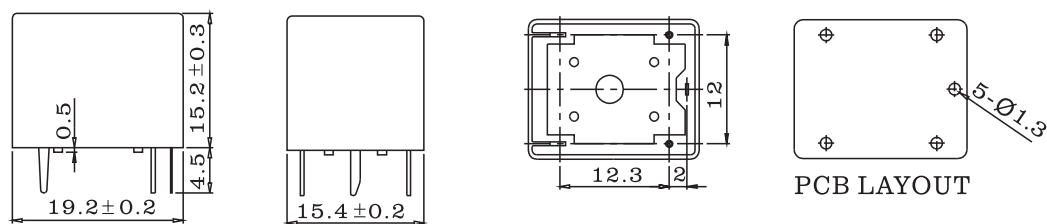
Item \ Type	10A	15A	20A
Contact Resistance	50mΩ Max. (Initial value)		
Operate Time	10msec Max.		
Release Time	5msec Max.		
Dielectric Strength between coil & contact between contact	AC1500V(1min.) AC750V(1min.)		
Insulation Resistance	100MΩ Min.(DC500V)		
Operating Ambient Temperature	-30°C ~ +80°C		
Humidity	35 to 85% RH		
Vibration Resistance	10G (10~55Hz)(Dual amplitude:1.5mm)		
Shock Resistance	10G		
Life Expectancy Mechanically Electrically	10,000,000 ops. Min.(1800 ops./h) 100,000 ops. Min.(1200 ops./h)		
Weight	8.5g(approx) , Latching Type 10g(approx.)		

CONTACT RATING

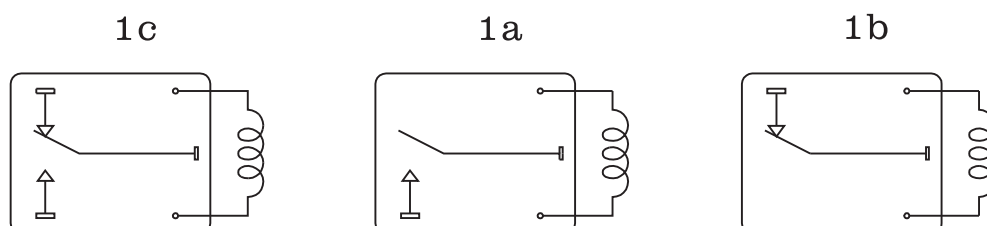
Item \ Type	10A	15A	20A
Rate Carrying Current	AC125V 10A AC250V 7A DC 24V 10A	AC125V 15A AC250V 10A DC 24V 15A	DC14V 20A DC30V 15A AC125V 15A
Max. Allowable Current	15A	20A	20A
Max. Allowable Voltage	AC 240V AC 110V		
Max. Current (continual)	10A	15A	20A
Contact Material	Ag alloy		

STANDARD

DIMENSIONS(Unit:mm)

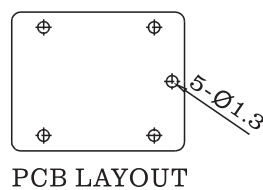
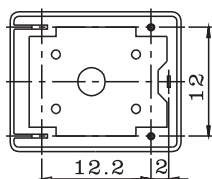
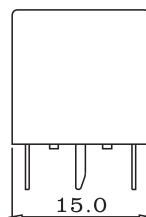
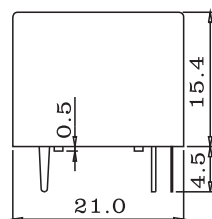


WIRING DIAGRAMS(Bottom View)

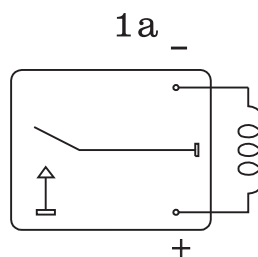
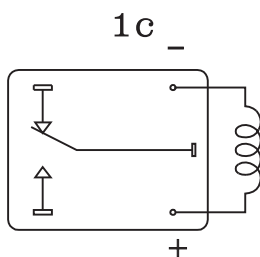


L1 Type (1 Coil Latching)

DIMENSIONS(Unit:mm)

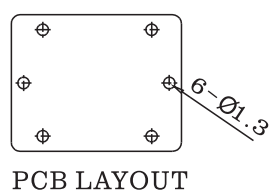
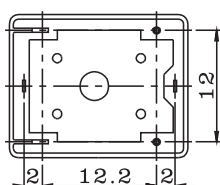
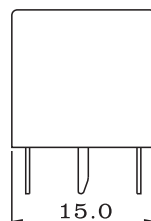
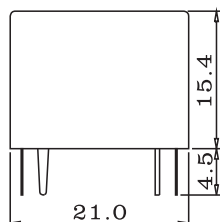


WIRING DIAGRAMS(Bottom View)

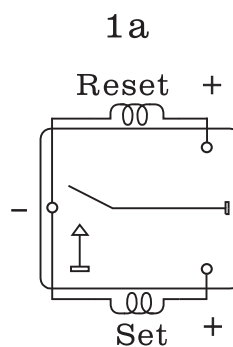
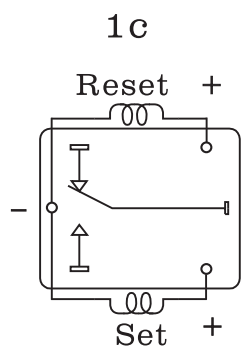


L2 Type (2 Coils Latching)

DIMENSIONS(Unit:mm)



WIRING DIAGRAMS(Bottom View)



REFERENCE DATA

