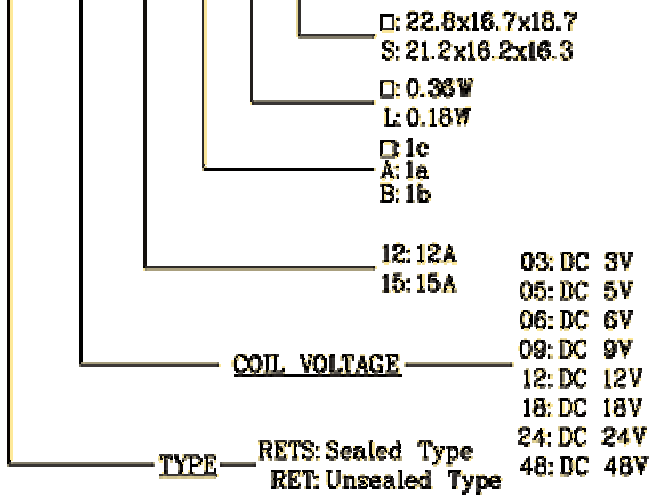


# RET SERIES

## ORDER CODE

RET-12-12-A-L-S



### Main Features:

- UL, CUR & TUV safety approval.
- TV-5 rating available.
- High sensitivity type.
- Epoxy seal type and flux free.
- Satisfying all requirements for use in car and household electric appliance.

## COIL RATING (at 20°C)

NOMINAL VOLTAGE (VDC)	COIL RESISTANCE (Ω) (+/- 10%)	POWER CONSUMPTION (W)	NOMINAL CURRENT (mA) (+/- 10%)	PULL IN VOLTAGE (VDC)	DROP OUT VOLTAGE (VDC)	MAX. ALLOWABLE VOLTAGE (VDC)
3V	25 Ω	0.36W	120.0 mA	75 % MAX.	10 % MIN.	110 %
5V	69 Ω		73.0 mA			
6V	100 Ω		60.0 mA			
9V	225 Ω		40.0 mA			
12V	400 Ω		30.0 mA			
18V	900 Ω		20.0 mA			
24V	1600 Ω		15.0 mA			
48V	6400 Ω		7.5 mA			

	NOMINAL VOLTAGE (VDC)	COIL RESISTANCE ( $\Omega$ ) (+/- 10%)	POWER CONSUMPTION (M)	NOMINAL CURRENT (mA) (+/- 10%)	PULL IN VOLTAGE (VDC)	DROP OUT VOLTAGE (VDC)	MAX ALLOWABLE VOLTAGE (VDC)
L	3V	50 $\Omega$	0.18W	60 mA	75 % MAX.	10 % MIN.	110 %
	5V	139 $\Omega$		36 mA			
	6V	200 $\Omega$		30 mA			
	9V	450 $\Omega$		20 mA			
	10V	556 $\Omega$		18 mA			
	12V	800 $\Omega$		15 mA			
	18V	1800 $\Omega$		10 mA			
	24V	3200 $\Omega$		7.5 mA			

## PERFORMANCE (at initial value)

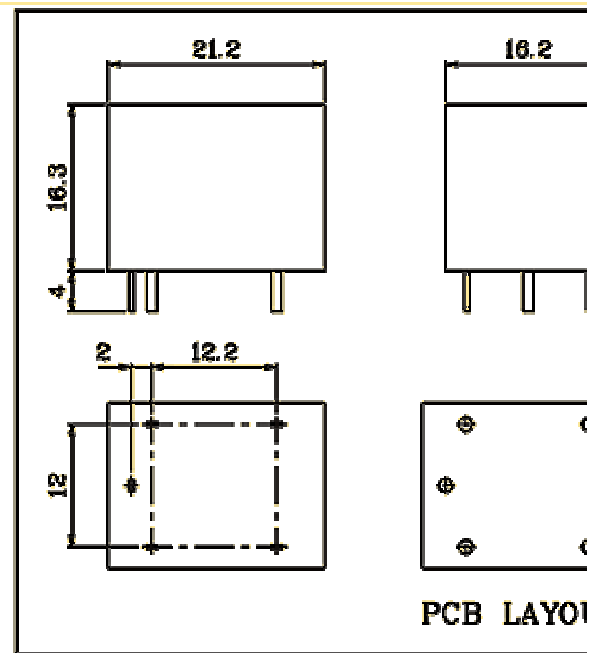
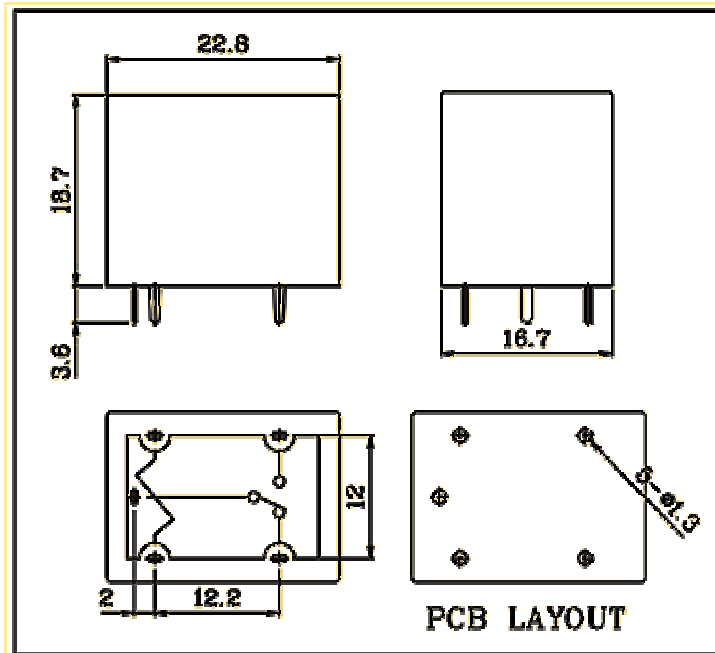
Item	Type	12A	15A
Contact Resistance		50m $\Omega$ Max. (initial value)	
Operate Time		10msec Max.	
Release Time		10msec Max.	
Dielectric Strength	between coil & contact between contact	AC 1500V (1min) AC 750V (1min)	
Insulation Resistance		100M $\Omega$ Min.(DC500V)	
Operating Ambient Temperature		-30°C ~ +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		11.5g (about)	

## CONTACT RATING

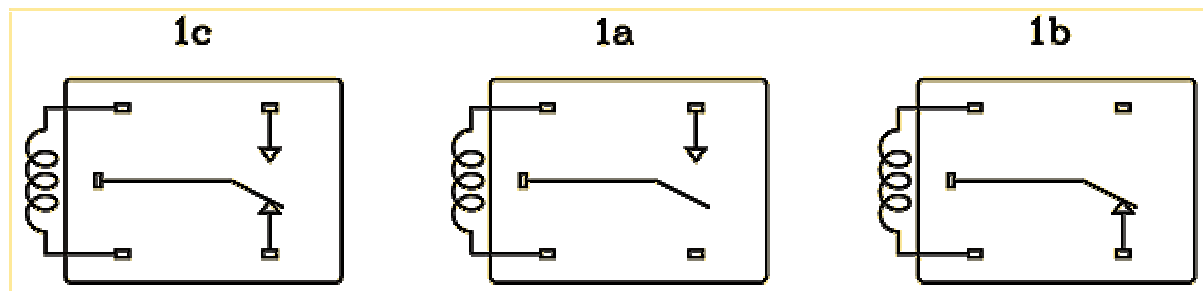
Item	Type	12A	15A
Rated Carrying Current		AC 250V 7A AC 120V 12A DC 30V 12A	AC 250V 10A AC 120V 15A DC 30V 15A
Max. Allowable Current		17A	20A

Max. Allowable Voltage	AC 250V DC 110V	
Max. Current (continual)	12A	15A
Contact Material	Ag alloy	

## DIMENSIONS (Unit : mm)



## WIRING DIAGRAMS (Bottom View)



## REFERENCE DATA

