

## Main Feature

1. High switching current up to 15A in small size.
2. Sugar-Cube relay suitable for various applications.
3. UL, C-UL & TÜV safety standard approved.
4. UL Class F insulation available.
5. Highly adapt to harsh conditions with high temperature and vibration.
6. Halogen Free series available.
7. Comply with RoHS and REACH regulations
8. In accordance with IEC 60335-1 Glow Wire requirements for home appliances.

## Contact Rating

Load Type	RW (DM/DB)	RW (D)	RWH (DM/DB)	RWH (D)
Rated Load (Resistive)	12A 120VAC(UL)	12A 120VAC(UL)	12A 250VAC(UL)	12A 250VAC(UL)
	10A 120VAC	10A 120VAC	10A 277VAC(TUV)	10A 277VAC(TUV)
	10A 24VDC	10A 24VDC	15A 120VAC	15A 120VAC
	-	-	15A 24VDC	15A 24VDC
Contact capacity	-	-	TV-5 120VAC (N/O)	TV-5 120VAC(N/O)
	-	-	Tungsten (1800W)	Tungsten (1800W)
	-	-	Tungsten (1800W)	Tungsten (1800W)
Rated Carrying Current	12A	12A	15A	15A
Max. Allowable Voltage	AC 240V	AC 240V	AC 240V	AC 240V
	DC 110V	DC 110V	DC 110V	DC 110V
Max. Allowable Current	12A	12A	15A	15A
Max. Allowable Power Force	1440VA	1440VA	3000VA	3000VA
	240W	240W	360W	360W
Contact Material	Ag Alloy	Ag Alloy	Ag Alloy	Ag Alloy
Contact Form	SPST	SPDT	SPST	SPDT

## Application

Domestic Appliances, Office Machines, Audio Equipment, Coffeepot, Control Units, etc.

## Performance (at Initial Value)

- Contact Resistance ..... 100mΩ Max. @1A,6VDC
- Operate Time..... 10mSec. Max.
- Release Time ..... 5 mSec. Max.
- Dielectric Strength:  
Between Coil & Contact..... 1,000VAC at 50/60 Hz for one minute  
Between Contacts ..... 500VAC at 50/60 Hz for one minute
- Surge Strength..... 3,000V (between Coil & Contact 1.2x50μSec.)
- Insulation Resistance ..... 100 MegaΩ Min. at 500VDC
- Max. On/Off Switching:  
Electrical..... 6 Cycles per Minute  
Mechanical ..... 300 Cycles per Minute

- Temperature Range..... -30~+85°C
- Humidity Range ..... 45~85% RH.
- Coil Temperature Rise ..... 35°C Max.
- Vibration:  
Endurance ..... 10 to 55 Hz dual amplitude width 1.5mm  
Error Operation..... 10 to 55 Hz dual amplitude width 1.5mm
- Shock:  
Endurance ..... 1,000 m/S<sup>2</sup>  
Error Operation..... 100 m/S<sup>2</sup>
- Life Expectancy:  
Mechanical ..... 10<sup>7</sup> Operations at No Load condition  
Electrical ..... 10<sup>5</sup> Operations at Rated Resistive Load
- Weight ..... About 9 g

## Safety Standard & File Number

- UL & C-UL ..... E141060
- TÜV ..... R09854380
- CQC.....09002037102

## Coil Specification (at 20°C)

Coil Sensitivity	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ( $\Omega \pm 10\%$ )	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Maximum Allowable Voltage (VDC)
RW/RWH	3	120	25	Abt. 0.36	75% Maximum	5% Minimum	130%
	5	71.4	70				
	6	60	100				
	9	40	225				
	12	30	400				
	18	20	900				
	24	15	1,600				
	48	7.5	6,400				

## Ordering Information

RW - SS - 1 12 D M F

Insulation System:

Nil: Standard Class

F: Class F

Contact Form:

Nil: One Form C

M: One Form A

B: One Form B

Coil Type:

D: Standard DC

Coil Voltage:

03: 3V, 05: 5V, 06: 6V, 09: 9V, 12: 12V,

18: 18V, 24: 24V, 36: 36V, 48: 48V

Number of Pole:

1: One Pole

Type of Sealing:

SS: RT II Flux Proofed

SH: RT III Wash Tight

Type:

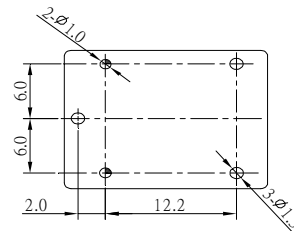
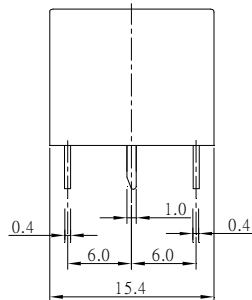
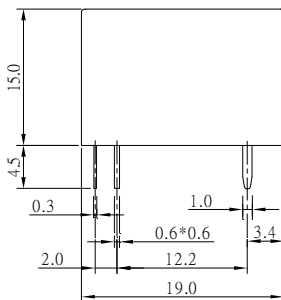
RW

RWH

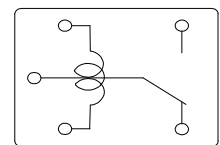
## Classification

Model	RW / RWH		
Contact Form	1C	1A	1B
Flux Proofed	RW / RWH -SS-1□□D	RW / RWH - SS-1□□DM	RW / RWH -SS-1□□DB
Wash Tight	RW / RWH-SH-1□□D	RW / RWH - SH-1□□DM	RW / RWH -SH-1□□DB

Dimension ( $\leq 5\text{mm} \pm 0.2\text{mm}$ ,  $> 5\text{mm} \pm 0.3\text{mm}$ , the tolerance of PCB thru hole:  $+0.1\text{mm}$ )



P.C.B. Layout



Bottom View

## Reference Data

