

## GENERAL PURPOSE POWER RELAY



### Features

- High switching capability: 12A;
- Low coil power consumption, low price;
- Subminiature, standard PCB layout;

### Contact Data

Model	YX202-DM	YX202-DB	YX202-D
Contact form	1a	1b	1c
Initial contact resistance	50mΩ Max.	50mΩ Max.	50mΩ Max.
Contact material	Silver alloy	Silver alloy	Silver alloy
Nominal switching capacity(res.load)	10A 250VAC	7A 250VAC	7A 250VAC
Max.Switching Current	15A	12A	12A
Max.switching voltage	277VAC	277VAC	277VAC
Max.switching power	2,500VA	1,750VA	1,750VA
Mechanical endurance (at 10,800 ops./h)	1x10 <sup>7</sup> Ops.	1x10 <sup>7</sup> Ops.	1x10 <sup>7</sup> Ops.
Electrical endurance(at 1,800 ops./h)	1x10 <sup>5</sup> Ops.	1x10 <sup>5</sup> Ops.	1x10 <sup>5</sup> Ops.

### Characteristics

Operate time(at nominal volt)	8ms Max.	
Release time(at nominal volt)	5ms Max.	
Initial insulation resistance	1,00MΩ Max.(500VDC)	
Initial Dielectric strength	between open contacts	750VAC, 50/60Hz 1Min.
	between coil&contacts	1,500VAC, 50/60Hz 1Min.
Vibration resistance	Functional	10~55HZ, Double amplitude of 1.5mm
	Destructive	10~55HZ, Double amplitude of 1.5mm
Shock resistance	Functional	10G Min.
	Destructive	100G Min.
Ambient temperature	-40℃~+105℃ ( no condensation )	
Unit weight	Approx.8.7g	

### Coil Data (at 23℃)

Nominal voltage (VDC)	Nominal operating current±10% (mA)	Coil resistance ± 10% (Ω)	Max. Allowable voltage	Pick-up voltage (Max.)	Drop-out voltage ( Min. )	Nominal operating power
3	120.0	25	130 %of nominal voltage	75 %of nominal voltage	5 %of nominal voltage	0.36W
5	71.5	70				
6	60.0	100				
9	40.0	225				
12	30.0	400				
15	24.0	625				
18	20.0	900				
24	15.0	1,600				
48	7.5	6,400				
60	6.0	10,000				

### Coil Data (at 23℃)

Nominal voltage (VDC)	Nominal operating current± 10% (mA)	Coil resistance ± 10% (Ω)	Max. Allowable voltage	Pick-up voltage (Max.)	Drop-out voltage ( Min. )	Nominal operating power
3	150.0	20	130 %of nominal voltage	75 %of nominal voltage	5 %of nominal voltage	0.45W
5	89.3	56				
6	75.0	80				
9	50.0	180				
12	37.5	320				
15	30.0	500				
18	25.0	720				
24	18.8	1,280				
48	9.4	5,120				

### Ordering Information

YX202-S-1 12 D M

Contact Form: Nil-Form C; M-Form A; B-Form B

Coil Power: D-0.36W, L-0.45W

Coil Voltage(VDC): 03, 05, 06, 09, 12, 15, 18, 24, 48, 60

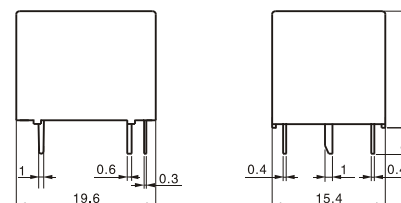
Number of Poles: 1-1 Pole

Protective Construction: S-Plastic sealed, SH-Sealed type washable

Type Designation.: YX202

### Outline Dimensions, Wiring Diagram and PC Board Layout (Unit:mm)

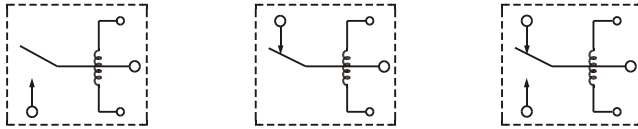
#### Outline Dimensions



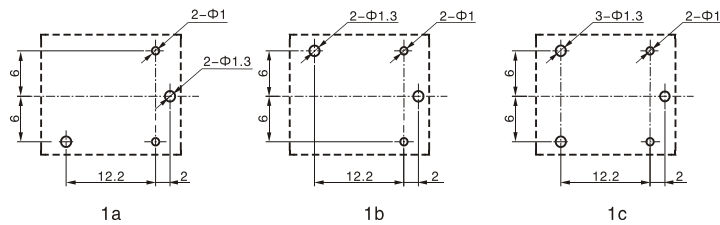
# YX202

## Outline Dimensions, Wiring Diagram and PC Board Layout (Unit:mm)

Wiring Diagram(Bottom View)



P.C.B Layout(Bottom View)



Unless otherwise specified:  
 < 1mm:  $\pm 0.2\text{mm}$   
 1~5mm:  $\pm 0.3\text{mm}$   
 > 5mm:  $\pm 0.4\text{mm}$

Note: 1, Extended terminal dimension is dimension before soldering;  
 2, Tolerance of PCB layout:  $\pm 0.1\text{mm}$ ;

## TYPICAL APPLICATIONS

- Home appliances such as air conditioner, electric heater etc;
- Vending machine;
- Office equipments such as computer, fax machine etc;
- Automatic electric controlled window, automotive antenna, door lock etc;

## CHARACTERISTIC CURVES

