

**Features**

- Miniature;
- Contact load capacity up to;
- PC board mounting and insert mounting available;
- Suitable for automobile system and automobile auxiliary etc;
- Sealed type available.

Ordering Information

<u>WM652</u>	<u>-12</u>	<u>-A</u>	<u>-R</u>	<u>-P</u>	<u>S</u>	<u>1.6</u>	<u>xxx</u>
1	2	3	4	5	6	7	8
1 Part number: WM652							
2 Coil rated Voltage(VDC): 6: 6V; 12: 12V; 24: 24V							
3 Contact Form: A:1A; B:1B; C:1C							
4 Coil transient suppression: D: with diode.; R: with resistance; Nil: standard							
5 Terminals: P: PCB type; Nil: plug in type							
6 Enclosure: S: Sealed							
7 Coil power: 1.6: 1.6W(standard); 1: 1W							
8 xxx: Customer special specification							

Contact Data

Contact Form	1A (SPSTNO)、1B(SPSTNC)、1C (SPDT(B-M))		
Contact Material	Ag Alloy		
Contact Rating (resistive)	1A	1B	1C
	30A/14VDC	20A/14VDC	NO: 30A/14VDC, NC: 20A/14VDC
Max. Switching Voltage	75VDC		
Max. Switching Current	30A		
Max. Switching Power	420W		
Contact Resistance or Voltage drop	≤100mΩ		
Electrical Life	1×10 ⁵ ops		
Mechanical Life	1×10 ⁷ ops		

Coil Parameter

Dash numbers 规格	Coil voltage (VDC)		Coil resistance Ω±10%		Pickup voltage VDC (Max.)	Release voltage VDC(Min.)	Operate Time	Release Time *See notes
	Rated	Max.	1.6W	1W				
6V	6V	7.8V	22.5	35	4.2V	0.6V	≤10 ms	≤10 ms *1)
12V	12V	15.6V	90	140	8.4V	1.2V		
24V	24V	31.2V	360	560	16.8V	2.4V	≤15 ms	≤15 ms *2)

Notes: *1) With resistance + 5ms; With diode + 10ms

*2) With diode + 10ms

Operation condition

Insulation Resistance		100MΩ Min. (at 500VDC)
Dielectric Strength	Between Contacts	50Hz 500VAC / 1 minute
	Between Coil and Contacts	50Hz 750VAC / 1 minute
Shock resistance		100m/s ² 11ms
Vibration resistance		10~40Hz double amplitude 1.27mm
Terminals strength		100N, 50N(for PCB type)
Solderability		235°C±2°C 3±0.5s
Ambient Temperature		-40°C~+85°C
Relative Humidity		85% (at 40°C)
Weight(Approx.)		20g

Layout (Bottom views, Unit: mm)

Dimensions / Wiring diagram (Bottom views)

Dimensions / Wiring diagram (Bottom views)

Plug in type

- Overall width: 23.2±0.2 mm
- Overall height: 25.5±0.2 mm
- Terminal spacing: 11 mm
- Terminal diameter: Φ1.5 mm
- Terminal length: 3.2 mm
- Terminal offset: 4.8 mm
- Terminal pitch: 3.6 mm
- Terminal diameter: Φ1.8 mm
- Terminal length: 6.3 mm
- Terminal offset: 4.2 mm

PCB type

- Overall width: 15.5±0.2 mm
- Overall height: 25.5±0.2 mm
- Terminal spacing: 5.7 mm
- Terminal diameter: Φ1.5 mm
- Terminal length: 3.2 mm
- Terminal offset: 4.8 mm
- Terminal pitch: 3.6 mm
- Terminal diameter: Φ1.8 mm
- Terminal length: 6.3 mm
- Terminal offset: 2.5 mm

Terminal Layout

Plug in type (Bottom views)

- 1A:** 2-4.8×0.8 mm terminal width, 9±0.2 mm height, 14±0.15 mm width, 2-6.3×0.8 mm terminal spacing.
- 1C:** 3-4.8×0.8 mm terminal width, 9±0.2 mm height, 14±0.15 mm width, 2-6.3×0.8 mm terminal spacing.

PCB type (Bottom view)

- 1A:** 4-2.5×0.8 mm terminal width, 9±0.2 mm height, 15±0.15 mm width, 8±0.15 mm terminal spacing.
- 1C:** 5-2.5×0.8 mm terminal width, 9±0.2 mm height, 15±0.15 mm width, 8±0.15 mm terminal spacing.

Wiring diagram (Bottom views)

- SPST (1A):** Single Pole Single Throw relay with terminals 85, 86, 87, 30.
- SPST (1B):** Single Pole Single Throw relay with terminals 85, 86, 87a, 30.
- SPDT (1C):** Single Pole Double Throw relay with terminals 85, 86, 87, 87a, 30.
- Coil: standard:** Standard coil configuration with terminals 85, 86, 87, 87a, 30.
- Coil: with Resistance:** Coil configuration with a resistor in parallel with the coil, terminals 85, 86, 87, 87a, 30.
- Coil: with Diode:** Coil configuration with a diode in parallel with the coil, terminals 85(-), 86(+), 87, 87a, 30.