# **JA3504A**

### **AUTOMOTIVE WIPER CONTROLLING RELAY**



## **Typical Applications**

Wiper control

### Features

- Special integrate circuit, reliable
- Solid base design, stable structure
- Wiper automatic positioning implementation

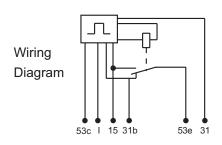
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Norminal voltage	12VDC			
Operating voltage range	9VDC to 16VDC			
Contact rating	Wiper: 5A 13.5VDC			
Wiping time	3.5s + 2.5s			
Intermission time	5.5s ± 1.5s			
Electrical endurance	1×10 <sup>5</sup> OPS (Wiper 5A 13.5VDC)			

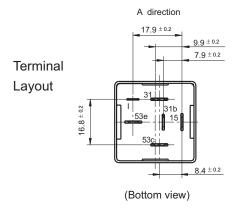
-40°C to 85°C
10Hz to 200Hz 49m/s <sup>2</sup> (5g)
196m/s² (20g)
Approx. 35g
cover retention (pull & push): 250N min.
terminal retention (pull & push): 110N min.

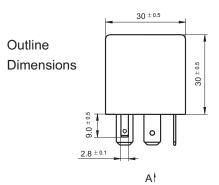
### **OUTLINE DIMENSIONS AND WIRING DIAGRAM**

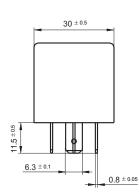
Unit: mm



- As is shown in left wiring diagram, for JA3504A, terminal 15 is connected with anode of 12VDC, terminal 31 with cathode, terminal I and 53e with combination switch, terminal 31b with wiper turbine switch, and terminal 53c with cleaning pump switch.
- Interval wiping: When terminal 53e is connected with wiper through combination switch, terminal I is powered with 12VDC through combination switch, inner relay runs, terminal 53e and 15 close, wiper runs. After terminal 31b get the feedback signal of 0VDC, inner relay releases, terminal 53e and 15 open. 5.5s ± 1.5s later, repeat the course above.
- 3. Washing: when terminal 53c is powered with 12VDC, inner relay runs, terminal 53e and 15 close, wiper starts to run until the 12VDC voltage on terminal 53c disappears and time delay 3.5s + 2.5s. After terminal 31b gets the feedback signal of 0V, inner relay releases, and wiper stops running.
- 4. JA3504A includes the function of automatic positoning.









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