

Automotive Relay



#### Features

- 70A high switching capability.
- 1 Form A contact configuration.
- High operating temperature;125℃
- Dust proof and sealed type available.
- Transient suppression resistance or diode paraleled type available.

## Contact Capacity

Model	YAL
Nominal Switching Capacity	70A 14VDC(at85℃) 50A 14VDC(at125℃)
Max.swithing current	70A
Max.swithing voltage	50VDC
Max.swithing power	980W

# Characteristic Data

Contact material	Silver alloy				
Initial contact resistance	20 mΩ Max.				
Operate time	10msec. Max.				
Release time	7msec. Max.				
Initial insulation resistance	500MΩ Min.(DC500V)				
Initial dielectric strength	Between open contacts: AC500V,50/60HZ 1Min.				
miliai dielectric strengtri	Between coil and contacts: AC500V,50/60HZ 1Min.				
Vibration resistance	6G 10-55HZ				
Shock resistance	30G 10-55HZ				
Mechanical	At 10,800ps.h 10,000,000 times				
Endurance Electrical	At 600ps.h 100,000 times				
Ambient temperature	–40℃ ~ +125℃( no condensation)				
Unit weight	Approx.36.0g				

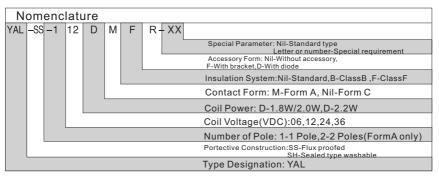
## Coil Data(at 20°C)

Nominal voltage (VDC)	Nominal operating current ± 10% (mA)	Coil resistance ±10% (Ω)	Parallel Resistance (Ω)	Equivalant Resistance (Ω)	Allowable voltage (Max.)	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
6	266.67	22.5	180	19.6		60%of nominal voltage	10%of nominal voltage	1.6W
12	133.33	90	680	79.5	150%of nominal			
24	66.67	360	2700	318				
6	266.67	20	180	18	voltage			
12	133.33	80	680	71.6	, in the second s			1.8W
24	66.67	320	2700	286				

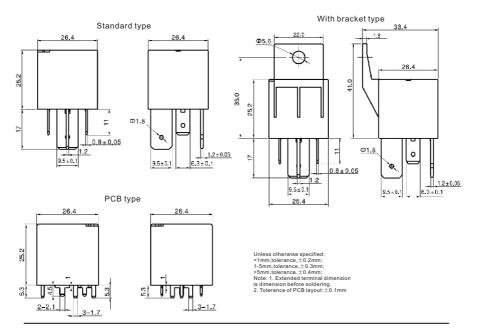
#### Coil Data(at 20°C)

١	Nominal voltage VDC)	Nominal operating current ± 10% (mA)	Coil resistance ±10% (Ω)	Parallel Resistance (Ω)	Equivalant Resistance (Ω)	Allowable voltage (Max.)	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
	6	333.33	18				60%of nominal voltage	10%of nominal voltage	
	12	166.67	72						Approx. 2.0g
	24	83.33	288			115%of			
	36	55.56	648			nominal			
	6	333.33	18	180	16	voltage			Approx. 2.2g
	12	166.67	72	680	65				
	24	83.33	280	2700	260				

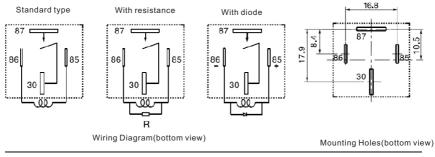
#### **Ordering Information**



Outline Dimensions, Wiring Diagram, Mounting Holes(Unit:mm)



Note: Specifications and dimensions in this catalog are subjected to change without notice.



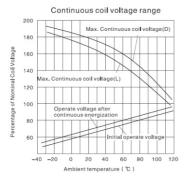
## **Typical Applications**

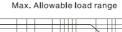
 Head light or foglight control, electric power distribution, traction control system, ABS

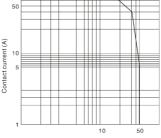
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• Cooling fan control, fuel pump control, heating control, automotive air conditioner, rear window defogger, battery breaking device.

## Characteristic Curves







Contact voltage ( VDC )