

## Automotive Relay I AP

RELAY / ISO9001 / IATF16949 CERTIFIED

#### Features

- 30A switching capability
- 1 Form A contact arrangement
- RoHS compliant
- Dimension: 24.2 x 23 x 28.5 mm

24.2 x 23 x 49.5 mm (Bracket)



## Application

Power Window / Compressor / Cooling Fan Control / Headlight Control / Window & Mirror Defogger, etc.

#### Contact Data

Contact Arrangement		1A		
Contact Material		Ag Alloy		
Contact Rating		30A 14VDC	15A 28VDC	
Max. Switching Power		420W		
Max. Switching Voltage 14VDC 28VDC		28VDC		
Max. Switching Current		30A	15A	
Contact Resis	tance	≤100mΩ		
Operation life	Electrical	1x10 <sup>5</sup>		
	Mechanical	1x10 <sup>7</sup>		

#### Coil Parameter

Coil Voltage		Coil Resistance		Pickup	Release	Coil Power	
(VDC)		(Ω±10%) at 23°C		Voltage	Voltage	Consumption (W)	
Rated	Max.	without	with R1	(max)	(min)	without	with R1
		resistor	resistor	(VDC)	(VDC)	resistor	resistor
12	15.6	100	680	8.4	1.2	approx.	approx.
24	31.2	400	2700	16.8	2.4	1.4	1.7



## Operation Condition

Speration Containen				
Insulation Resistance		100MΩ min (at 500VDC)		
Dielectric	Between Contacts	500VAC, 50/60Hz 1 min.		
Strength	Between Contact and Coil	500VAC, 50/60Hz 1 min.		
Shock	Operating Extremes	10G		
Resistance	Damage Limits	100G		
Vibration	Operating Extremes	10~500Hz, 5.0G		
Resistance	Damage Limits	10~500Hz, 5.0G		
Ambient Temperature		-40~105°C (no freezing)		
Operate Time		≦10ms		
Release Time		≦5ms		
Relative Humidity		5%~85%		
Weight		Approx. 24g		

## Ordering Information

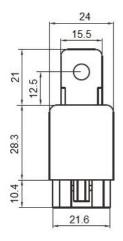
		APB	-12D	R	(XXX)
Model	AP: without bracket				
Wiodei	APB: with bracket				
Coil Voltage	<b>12</b> : 12VDC <b>24</b> : 24VDC				
	Nil: Standard				
Paralleled	<b>R</b> : with resistor (680 $\Omega$ 12V) (2700 $\Omega$ 24V)				
Component	D1: with diode (please refer to diagram)				
	D2: with diode (please refer to diagram)				
Special Code	Nil: Standard XXX: Customer special	require	ment		

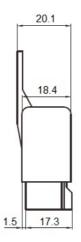


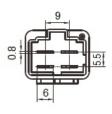
# Dimensions (UNIT: mm)

#### **Outline Dimensions**

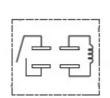
## Mounting (Bottom views)

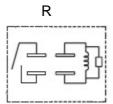


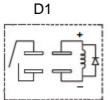


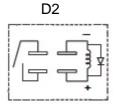


## Wiring Diagram (Bottom views)









## Engineering Data

