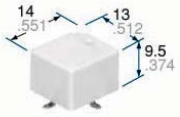


Relays & Solenoids

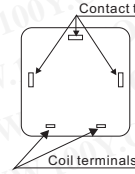
NAIS PCB Relays

Detailed product specifications are available on: us.100y.com.tw



FEATURES

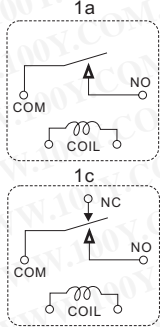
- **Low profile**
 <Height>PC board terminal type: 9.5 mm .374 inch
 Surface-mount terminal type: 10.5mm .413inch
- **High capacity**
 CP Relay provides low profile spacesaving advantages while offering high continuous current of 25 A(1 hour).
- **Sealed construction suitable for harsh environments**
- **Simple footprint pattern enables ease of PC board layout**



- **“PC board terminal” and “Surface mount terminal” types available**
 SMD automatic mounting is possible for surface mount terminal types because tube packaging is used.

TYPICAL APPLICATIONS

- Power windows
- Auto door lock
- Power sunroof
- Memory sheet
- Wiper• Defogger
- Blower fan
- EPS
- ABS etc.



SPECIFICATIONS

Contact

Arrangement	1 Form C	
Contact material	Ag alloy (Cadmium free)	
Initial contact resistance (Initial) (By voltage drop 6V DC 1A)	Typ. 3 mΩ (N.O.) Typ. 4 mΩ (N.C.)	
Rating	Nominal switching capacity	20 A 14 V DC (N.O.) 10 A 14 V DC (N.C.)
	Max. switching voltage	16 V DC
	Max. carrying current	N.O. 40 A for 2 minutes 30 A for 1 hour (12 V, at 20°C 68°F) 35 A for 2 minutes 25 A for 1 hour (12 V, at 85°C 185°F)
Min. switching capacity*1	1 A 12 V DC	

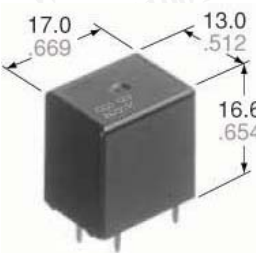
Characteristics

Max. operating speed (at rated load)	6cpm	
Initial insulation resistance*5	Min. 100MΩ (at 500 V DC)	
Shock resistance	Functional*8	Min. 100 m/s ² {10 G}
	Destructive*9	Min. 1,000 m/s ² {100 G}
Vibration resistance	Functional*10	10 Hz to 100 Hz, Min. 44.1 m/s ² {4.5 G}
	Destructive	10 Hz to 500 Hz, Min. 44.1 m/s ² {4.5 G}
Mass	Approx. 4g .14 oz	

Coil

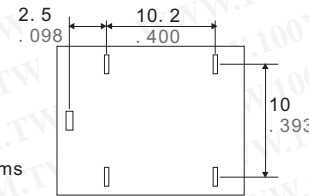
Nominal operating power	640 mW
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Part No.	Product No.	Manufacturer	Description	Coil Voltage	Type
47116	CP1SA-12V-X	NAIS	MINIATURE, LOW PROFILE AUTOMOTIVE RELAY	12V	CP

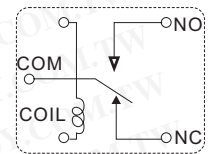


FEATURES

- **Silent**
 Noise has been reduced by approximately 20 dB, using our own silencing design.
- **Less space required**
 Measuring only 17(L)×13(W)mm (.669(L)×.512(W) inches), this product ranks first among automotive quiet relays in terms of saving space.
- **Sealed construction**
- **Next-generation standard terminal pitch employed**
 The terminal array used is identical to that used in JJM relays.



Schematic (Bottom view)



SPECIFICATIONS

Contact

Arrangement	1 Form C	
Contact material	Ag alloy (Cadmium free)	
Initial contact resistance (Initial) (By voltage drop 6 V DC 1A)	Typ. 7 mΩ (N.O.) Typ. 8 mΩ (N.C.)	
Contact voltage drop	Max. 0.2V (at 10 A)	
Rating	Nominal switching capacity	N.O.: 20 A 14 V DC N.C.: 10 A 14 V DC
	Max. carrying current	35 A for 2 minutes, 25 A for 1 hour (12 V, at 20°C 68°F) 30 A for 2 minutes, 20 A for 1 hour (12 V, at 85°C 185°F)
	Min. switching capacity*1	1 A 12 V DC

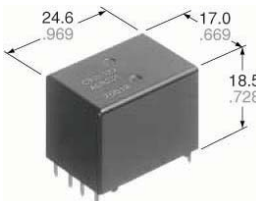
Characteristics

Max. operating speed (at nominal switching capacity)	6 cpm	
Initial insulation resistance*3	Min. 100 MΩ (at 500 V DC)	
Shock resistance	Functional*6	Min. 100 m/s ² {10G}
	Destructive*7	Min. 1,000 m/s ² {100G}
Vibration resistance	Functional*8	10 Hz to 100 Hz, Min. 44.1 m/s ² {4.5G}
	Destructive*9	10 Hz to 500 Hz, Min. 44.1 m/s ² {4.5G}
Mass	Approx. 6.5g .23 oz	

Coil

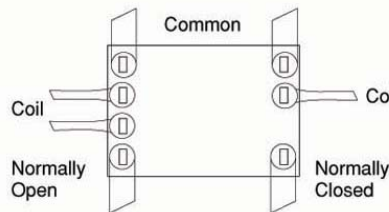
Nominal operating power	640 mW
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Part No.	Product No.	Manufacturer	Description	Coil Voltage	Type
47125	CQ1-12V	NAIS	1 FORM C AUTOMOTIVE SILENT RELAY	12V	CQ

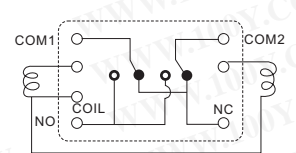


FEATURES

- **Silent**
 Noise has been reduced by approximately 20 dB, using our own silencing design.
- **Twin (1 Form C × 2)**
 Forward/reverse motor control is possible with a single relay.
- **Sealed construction**
- **Simple footprint enable ease of PC**



Schematic (Bottom view)



SPECIFICATIONS

Contact

Arrangement	1 Form C × 2	
Contact material	Ag alloy (Cadmium free)	
Initial contact resistance (Initial) (By voltage drop 6 V DC 1A)	Typ. 6 mΩ (N.O.) Typ. 9 mΩ (N.C.)	
Rating	Nominal switching capacity	N.O.: 20 A 14 V DC N.C.: 10 A 14 V DC
	Max. carrying current	35 A for 2 minutes, 25 A for 1 hour (12 V, at 20°C 68°F) 30 A for 2 minutes, 20 A for 1 hour (12 V, at 85°C 185°F)
	Min. switching capacity*1	1 A 12 V DC

Characteristics

Max. operating speed (at nominal switching capacity)	6 cpm	
Initial insulation resistance*4	Min. 100 MΩ (at 500 V DC)	
Initial breakdown voltage*5	Between open contacts	500 Vrms for 1 min.
	Between contacts and coil	500 Vrms for 1 min.
Shock resistance	Functional*7	Min. 100 m/s ² {10G}
	Destructive*8	Min. 1,000 m/s ² {100G}
Vibration resistance	Functional*9	10 Hz to 100 Hz, Min. 44.1 m/s ² {4.5G}
	Destructive*10	10 Hz to 500 Hz, Min. 44.1 m/s ² {4.5G}

