



Relays & Solenoids

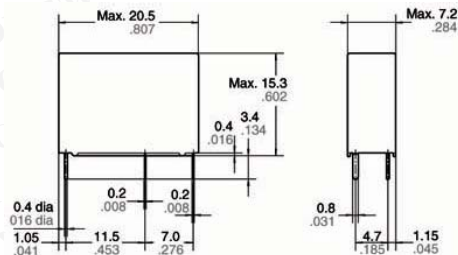
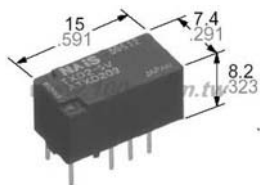
NAIS_PCB Relays

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

SPECIFICATIONS

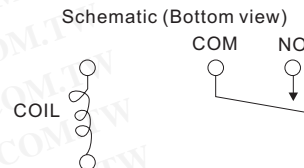
Contact

Arrangement	1 Form A	
Initial contact resistance, max. (By voltage drop 6 V DC 1 A)	Max. 100 mΩ	
Contact material	AgSnO ₂ type	
Rating (resistive load)	Nominal switching capacity	3 A 277 V AC, 3 A 30V DC
	Max. switching power	831 VA (AC), 90W (DC)
	Max. switching voltage	277 V AC, 30 V DC
	Max. switching current	3 A
	Min. switching capacity*1	100 mA, 5 V DC
Expected life (min. operations)	Mechanical (at 180 cpm)	
	Electrical (at 20 cpm) (at rated load)	5 × 10 ⁶
	3A 125V AC, 3A 30V DC	2 × 10 ⁵
	3A 250V AC	10 ⁵



Characteristics

Max. operating speed	20 cpm (at rated load)	
Initial insulation resistance*1	Min. 1,000 MΩ (at 500 V DC)	
Initial*2 breakdown voltage	Between open contacts	750 Vrms for 1 min.
	Between contact and coil	4,000 Vrms for 1 min.
Initial surge voltage between contact and coil*3	Min. 10,000 V	
Operate time*4 (at nominal voltage)	Max. 10ms (at 20°C 68°F)	
Release time (with diode)*4 (at nominal voltage)	Max. 10ms (at 20°C 68°F)	
Temperature rise (at 70°C 158°F)	Max. 45°C with nominal coil voltage and at 3 A contact carrying current (resistance method)	
Shock resistance	Functional*5	Min. 300 m/s ² {approx. 30 G}
	Destructive*6	Min. 1,000 m/s ² {approx. 100 G}
Vibration resistance	Functional*7	10 to 55Hz at double amplitude of 1.5mm
	Destructive	10 to 55Hz at double amplitude of 1.5mm
Unit weight	Approx. 4 g .14 oz	



Part No.	Product No.	Manufacturer	Description	Coil Voltage	Type
46963	ALD112W	NAIS	1 FORM A SLIM POWER RELAY	12V	LD

FEATURES

1. Price competitive

having better price competitiveness (New PCB type 400 mW only)

2. Supports magnetron and heater loads.

Switching possible for magnetron and heater loads found in microwave ovens.

3. Excellent heat resistance

Ambient temperature: up to 85°C 185°F This satisfies UL coil insulation class B/class F available

TYPICAL APPLICATIONS

- Microwave ovens
- Refrigerators
- OA equipment

4. High insulation resistance

Creepage distance and clearances between contact and coil: Min. 8 mm .315 inch Surge withstand voltage: Min. 10,000V

5. Low operating power

Nominal operating power: 400mW/200mW (High sensitive type)

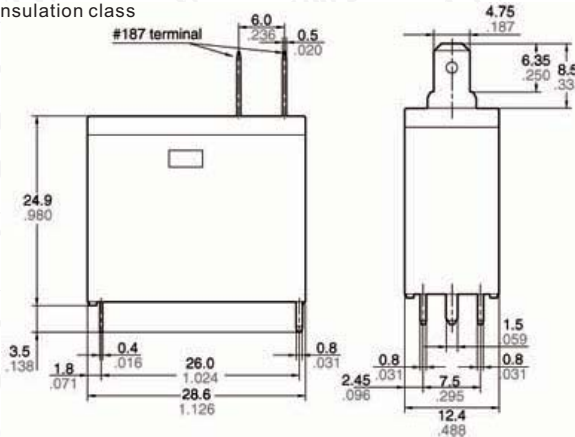
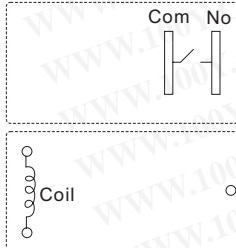
6. A wide variety of types

Product line consists of 5 types with different shapes and pins

7. Conforms to the various safety standards:

UL/CSA, TÜV, VDE approved and SEMKO available

Schematic (Bottom view)



SPECIFICATIONS

Contact

Arrangement	1 Form A	
Initial contact resistance, max. (By voltage drop 6 V DC 1 A)	100 mΩ	
Contact material	AgSnO ₂ type	
Rating (resistive load)	Nominal switching capacity	16 A 277 V AC
	Max. switching power	4,432 VA
	Max. switching voltage	277 V AC
	Max. switching current	16 A
	Min. switching capacity*1	100 mA, 5 V DC
Expected life (min. Operations)	Mechanical (at 180 cpm)	
	Electrical (at 20 cpm) (Resistive load)	2 × 10 ⁶
		10 ⁵

Characteristics

Max. operating speed (at rated load)	20 cpm	
Initial insulation resistance*1	Min. 1,000 MΩ (at 500 V DC)	
Initial breakdown voltage*2	Between open contacts	1,000 Vrms for 1 min.
	Between contacts and coil	4,000 Vrms for 1 min.
Initial surge voltage between contact and coil*3	Min. 10,000 V	
Operate time*4 (at nominal voltage) (at 20°C 68°F)	Max. 20ms	
Release time (with diode)*4 (at nominal voltage) (at 20°C 68°F)	Max. 20ms Max. 25ms (200 mW type)	
Temperature rise (at nominal voltage) (resistance method, contact current 16 A, 20°C 68°F)	Max. 55°C Max. 45°C (200 mW type)	
Shock resistance	Functional*5	Min. 200 m/s ² {20 G}
	Destructive*6	Min. 1,000 m/s ² {100 G}
Vibration resistance	Functional*7	10 to 55Hz at double amplitude of 1.5mm
	Destructive	10 to 55Hz at double amplitude of 1.5mm
Conditions for operation, transport and storage*8 (Not freezing and condensing at low temperature)	Ambient temp.	-40°C to +85°C -40°F to +185°F
	Humidity	5 to 85% R.H.
Unit weight	Approx. 17 g .60 oz	

Coil

Type	Standard	High sensitive
Nominal operating power	400 mW	200 mW

Part No.	Product No.	Manufacturer	Description	Coil Voltage	Type
46959	ALE12B24	NAIS	16A POWER RELAY FOR MICRO WAVE OVEN	24V	LE

