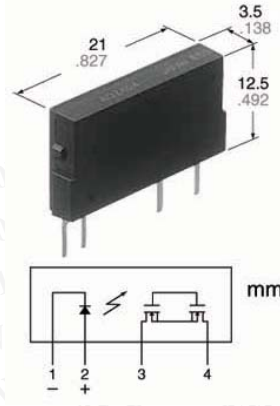




Relays & Solenoids

NAIS_PCB Relays

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

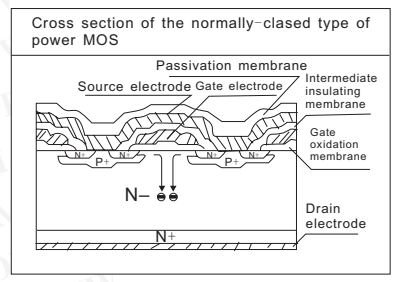


FEATURES

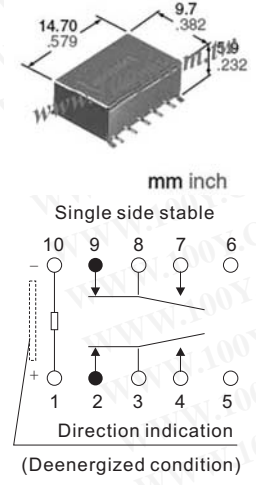
- High capacity**
A maximum 0.5A load can be controlled with a 5 mA input current. The ON resistance is low at 2.8Ω (typ.)
- 1 Form B**
This has been realized thanks to the built-in MOSFET processed by our proprietary method, DSD (Double-diffused and Selective Doping) method.
- Compact slim-type 4-pin SIL**
(W)3.5×(D)21.0×(H)12.5 mm (W).138×(D).827×(H).492 inch×The compact size of the 4-pin SIL package allows high density mounting.

TYPICAL APPLICATIONS

- Railroad, traffic signals
- Measurement instruments
- Testing equipment



Part No.	Product No.	Manufacturer	Description	Contact Arrangement	Contact Rating	Coil Voltage	Recognized Safety	Outline L*W*H	Type
47447	AQZ404	NAIS	NAIS_Power PhotoMOS RELAY	1 Form B	400V / 0.5A	400V	UL(E43149),C-UL	(W)3.5×(D)21.0×(H)12.5 mm	AQZ404



FEATURES

- High frequency characteristics (Impedance 50Ω, ~1.0GHz)**
 - Insertion loss; Max. 0.3dB
 - Isolation; Min. 20dB (Between open contacts)
Min. 30dB (Between contact sets)
 - V.S.W.R.; Max. 1.2
- Surface mount terminal**
This relay is a surface-mounted model with excellent high-frequency properties. In addition, it can use a microstrip line in the base circuit design which spares the labor of machining the base.

SPECIFICATIONS

Contact		2 Form C
Arrangement		2 Form C
Contact material		Gold-clad silver alloy
Initial contact resistance (By voltage 6V DC 1A)		Max. 75mΩ
Rating	Contact rating (resistive)	10mA 10 V DC 1A 30 V DC
	Contact carrying power	Max. 3W (at 1.0GHz, impedance 50Ω, V.S.W.R. Max.1.2)
	Max. switching voltage	30 V DC
	Max. switching current	1A

3. Low profile small type

9.7(W)×14.7(L)×5.9(H) mm
.382(W)×.579(L)×.232(H) inch

4. High sensitivity: 140 mW nominal operating power

5. High contact reliability
Electrical life: Min. 10⁷ (10mA 10V DC)

TYPICAL APPLICATIONS

- Measurement instruments
- Oscilloscope attenuator circuit

Characteristics

Initial insulation resistance *1	Min. 100 MΩ (at 500 V DC)
Initial breakdown voltage *2	Between open contacts: 750 Vrms for 1 min.
	Between contact sets: 1,000 Vrms for 1 min.
	Between contact and coil: 1,000 Vrms for 1 min.
Between contact and earth terminal: 1,000 Vrms for 1 min.	
Temperature rise (at 20°C) *4	Max. 60°C
Shock resistance	Functional *5: Min. 500 m/s ²
	Destructive *6: Min. 1,000 m/s ²
Vibration resistance	Functional *7: 10 to 55 Hz at double amplitude of 3mm
	Destructive: 10 to 55 Hz at double amplitude of 5mm
Unit weight	Approx. 2g .07oz

Part No.	Product No.	Manufacturer	Description	Coil Voltage	Type
47144	ARA200A12(Z)	NAIS	1.0GHz 2 Form C RELAY	12V	RA



FEATURES

1. High frequency characteristics (Impedance 50Ω)

Frequency (Ghz)	to 1	1 to 4	4 to 8	8 to 12.4	12.4 to 18	18 to 26.5*
V.S.W.R. (Max.)	1.1	1.15	1.25	1.35	1.5	1.7
V.S.W.R. SP6T Terminating resistor (max.)	1.20	1.40	1.50	—	—	—
Insertion loss (dB. Max.)	0.2	0.3	0.4	0.5	0.8	—
Isolation (dB. Min.)	85	80	70	65	60	55

2. SPDT, Transfer and SP6T types are available

3. High sensitivity

Nominal operating power: 840 mW (SPDT/SP6T, Failsafe type)
1,540 mW (Transfer, Failsafe type)

4. Long life: 5 × 10⁶

SPECIFICATIONS

Contact		SPDT
Arrangement		SPDT
Contact material		Gold
Initial contact resistance (By voltage drop 6V DC 1A)		Max. 100mΩ
Rating	Contact input power	120W 3GHz (V.S.W.R. 1.15 or less, no contact switching, ambient temperature 40°C [SPDT], 25°C [Transfer])#1
	Indicator rating	Max. 30V 100mA
Initial contact resistance (Measured by 5V 100mA)		Max. 1Ω

5. Terminating resistor type added

Thanks to the addition of terminating resistor, steady high frequency characteristics can be maintained when contacts are either open or closed and this contributes to increase system reliability.

6. + COM type is available

TYPICAL APPLICATIONS

Wireless and mobile communication

- Cellular phone base stations
- Amplifier switching

Digital broadcasting

- Broadcasting relay station
- Broadcasting equipment

Measurement instruments

All types of inspection equipment

