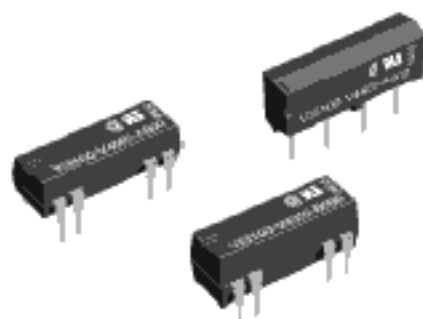




## V23100-V4 series

### Dual In-line Package and Single In-line Package Dry Reed Relays

#### Features

- DIP (flat and high) and SIP versions.
- For use in measuring and control systems.
- Direct coil control with TTL-signals.
- IC pin compatible.
- Low operating noises and low thermoelectric voltage.
- Ultrasonic cleanable.
- High vibration and shock resistance.

#### Contact Data @ 25°C

| Type of Relay                             | DIP Version                      |                | SIP Version              |
|-------------------------------------------|----------------------------------|----------------|--------------------------|
| Type of Contacts                          | SPST, 1 Form A<br>DPST, 2 Form A | SPDT, 1 Form C | SPST, 1 Form A           |
| Max. Switch. Current                      | 0.5A                             | 0.25A          | 0.5A                     |
| Max. Continuous Current                   | 1A                               | 1.2A           | 1A                       |
| Max. Switch. Voltage<br>@ nominal voltage | 180VDC/MAC<br>200VDC/MAC         | 175VDC         | 180VDC/MAC<br>200VDC/MAC |
| Max. Switch. Capacity<br>VDC<br>VAC       | 10W<br>10VA                      | 3W<br>3VA      | 10W<br>10VA              |
| Expected Mech. Life                       | 5 Million Ops.                   | 4 Million Ops. | 5 Million Ops.           |
| Initial Contact Resist.                   | 150mΩ @ 10Ma/20mV                |                |                          |

#### Initial Dielectric Strength

Between Form A Contacts: 250VDC (12V-24V coils), 210VDC (5V coils).  
Form C Contacts: 200VDC.  
Between Coil and Contacts: 1,500VDC.

#### Initial Insulation Resistance

Between Mutually Insulated Conductors:  $10^{11}$  ohms @ 500VDC.

#### Coil Data @ 25°C

Nominal Voltage: 5 to 24VDC.  
Nominal Power: 50 - 288mW.  
Maximum Coil Power:  
Temperature Rise:  
Duty Cycle:

#### Coil Data @ 20°C

CON DATA 3-20-0

| Nominal<br>Voltage<br>(VDC)          | Resistance<br>± 10%<br>(Ohms) | Operating<br>Voltage (VDC) |            |
|--------------------------------------|-------------------------------|----------------------------|------------|
|                                      |                               | (Min.)                     | (Max.)     |
| DIP and SIP Version: SPST - 1 Form A |                               |                            |            |
| 5                                    | 500                           | 3.5                        | 22         |
| 12                                   | 1,000                         | 8.4                        | 33         |
| 15                                   | 2,000                         | 10.5                       | 44         |
| 24                                   | 2,000                         | 16.8                       | 44         |
| DIP Version: DPST - 2 Form A         |                               |                            |            |
| 5                                    | 200                           | 3.5                        | 14         |
| 12                                   | 500                           | 8.4                        | 25         |
| 15                                   | 2,000                         | 10.5                       | 47         |
| 24                                   | 2,000                         | 16.8                       | 47         |
| DIP Version: SPDT -1 Form C          |                               |                            |            |
| 5                                    | 200                           | 3.5                        | 13 (14.5)* |
| 12                                   | 500                           | 8.4                        | 22 (23.5)* |
| 15                                   | 2,000                         | 10.5                       | 44 (49.0)* |
| 24                                   | 2,000                         | 16.8                       | 44 (49.0)* |

\*Values in brackets refer to high relay version with protective diode.

#### Operate Data @ 20°C

**Must Operate Voltage:** 70% of nominal voltage.  
**Must Release Voltage:** 15% of nominal voltage.

| Type of Relay                      | DIP Version                      |                | SIP Version    |
|------------------------------------|----------------------------------|----------------|----------------|
| Type of Contacts                   | SPST, 1 Form A<br>DPST, 2 Form A | SPDT, 1 Form C | SPST, 1 Form A |
| Operate Time<br>(Including Bounce) | 0.5ms                            | 0.7ms          | 0.5ms          |
| Release Time<br>(Including Bounce) | 0.2ms                            | 1.0ms          | 0.2ms          |

**Operate Bounce:**

**Release Bounce:**

#### Environmental Data

**Temperature Range:** -20°C to +70°C.  
**Vibration, Operational:**  
**Shock, Operational:**  
**Shock, Non-destructive:**

#### Mechanical Data

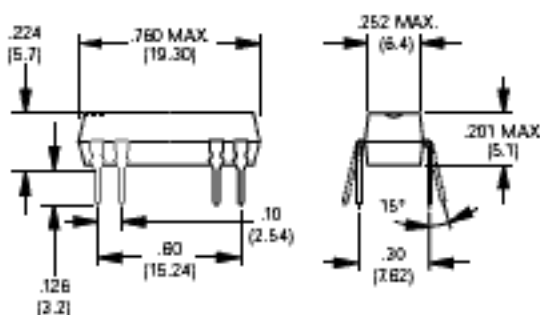
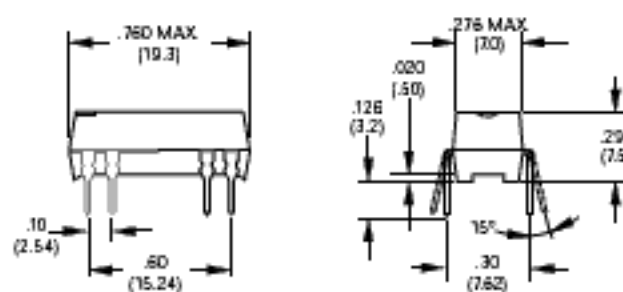
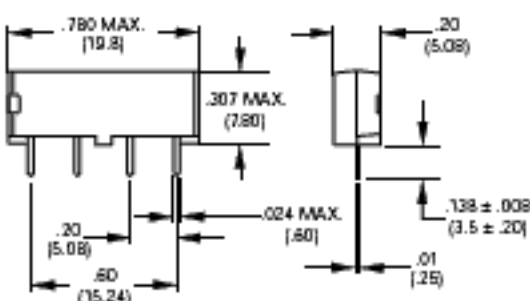
**Termination:**  
**Enclosure:**  
**Weight:**

**Ordering Information**

|                                                                                                                                                                                                                                                               |  |                  |          |           |          |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------|----------|-----------|----------|------------|
| Typical Part Number ►                                                                                                                                                                                                                                         |  | <b>V23100-V4</b> | <b>3</b> | <b>24</b> | <b>A</b> | <b>011</b> |
| <b>1. Basic Series:</b><br>V23100-V4 – DIL and SIP reed relay.                                                                                                                                                                                                |  |                  |          |           |          |            |
| <b>2. Version:</b><br>DIP flat package: 0 = 1 Form A contacts.      3 = 1 Form C standard and 1 Form C with electrostatical shield.<br>DIP high package: 3 = 2 Form A contacts and 1 Form C with diode or electrostatical shield and diode.<br>SIP package: 5 |  |                  |          |           |          |            |
| <b>3. Coil Voltage:</b><br>05 = 5VDC      12 = 12VDC      15 = 15VDC      24 = 24VDC                                                                                                                                                                          |  |                  |          |           |          |            |
| <b>4. Contact Arrangement:</b><br>A = 1 Form A (not for high DIP).      B = 2 Form a (high DIP only).      C = 1 Form C (not for SIP).                                                                                                                        |  |                  |          |           |          |            |
| <b>5. Options:</b><br>000 = standard.      001 = with electrostatical shield      010 = with diode.      011 = with electrostatical shield and diode.                                                                                                         |  |                  |          |           |          |            |

**Stock Items – The following items are normally maintained in stock for immediate delivery.**

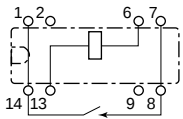
|                 |                 |
|-----------------|-----------------|
| V23100V4005A000 | V23100V4505A000 |
| V23100V4012A000 | V23100V4517A000 |
| V23100V4024A000 | V23100V4524A000 |

**Outline Dimensions**
**DIP Version (Flat)**

**DIP Version (High)**

**SIP Version**


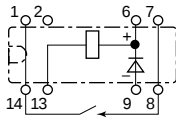
## Wiring Diagrams (Bottom Views)

### DIP Version (Flat)

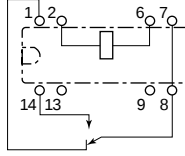
**SPST-1 Form A**  
standard



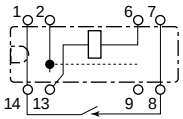
**SPST-1 Form A**  
w/diode



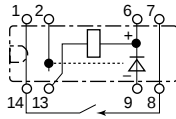
**SPDT-1 Form C**  
standard



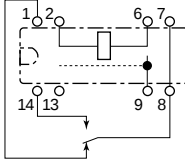
**SPST-1 Form A**  
w/electrostatic Shield



**SPST-1 Form A**  
w/electrostatic shield and diode

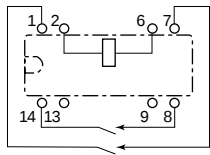


**SPDT-1 Form C**  
w/electrostatic shield

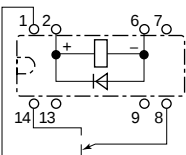


### DIP Version (High)

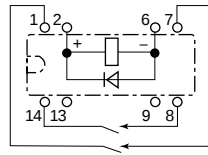
**DPST-2 Form A**  
standard



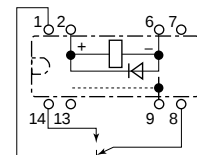
**SPDT-1 Form C**  
w/diode



**DPST-2 Form A**  
w/diode

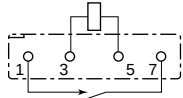


**SPDT-1 Form C**  
w/electrostatic shield and diode

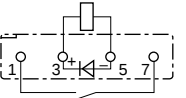


### SIP Version

**SPST-1 Form A**  
standard

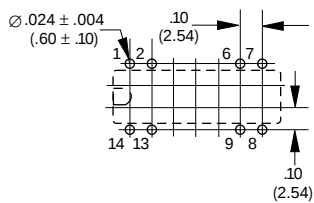


**SPST-1 Form A**  
w/diode

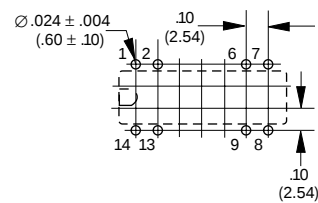


## PC Board Layouts (Bottom Views)

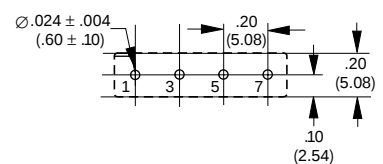
### DIP Version (Flat)



### DIP Version (High)



### SIP Version





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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