

JWD/JWS Series Reed Relays

- JWD has dual in-line package (DIP) configuration (14-pin DIP)
- JWS has single in-line package (SIP) configuration
- Low cost, dry reed reliability with various contact arrangements
- Wave solderable and immersion cleanable molded epoxy package
- Optional coil suppression diode

Typical applications

Telecommunications, measurement and control, automated test equipment, security systems, medical equipment.



Approvals

UL E29244, CSA LR81479
Technical data of approved types on request

Contact Data

| | |
|--|--------------------------------|
| Contact arrangement | 1 form A (NO) contact |
| JWD and JWS | 1 form B (NC), 1 form C (CO), |
| JWD only | 2 form A (NO) |
| Rated voltage | 20VDC, 500mA |
| 1 form A, 1 form B and 2 form A | 10 VDC, 500mA and 10VDC, 10mA |
| 1 form C (CO) | |
| Max. switching voltage | 100VDC |
| 1 form A, 1 form B and 2 form A | 28VDC |
| 1 form C (CO) | |
| Rated current | 500mA, 20VDC |
| 1 form A, 1 form B and 2 form A | 500mA, 10VDC |
| 1 form C (CO) | |
| Limiting making current | 500mA |
| Limiting breaking current | 500mA |
| Switching power | 10W |
| form A (NO) and form B (NC) | 3W |
| form C (CO) | |
| Contact material | Ruthenium |
| Min. recommended contact load | 10mV, 10mA |
| Minimum switching voltage | 10mV |
| Initial contact resistance | 200mΩ max. at 10mA, 6VDC |
| Frequency of operation | 100Hz |
| Operate/release time max., incl. bounce | 1.5/0.5ms |
| form A (NO) and form B (NC) | 1.5/3.0ms |
| form C (CO) | |
| Electrical endurance | 1x10 ⁶ ops. |
| form A (NO) and form B (NC), resistive load, +25°C | 20x10 ⁶ ops. |
| 20VDC, 500mA | 100x10 ⁶ ops. |
| 20VDC, 250mA | |
| 5VDC, 1mA | |
| form C (CO) contact, resistive load, +25°C | 1x10 ⁶ ops. |
| 10VDC, 500mA | 20x10 ⁶ ops. |
| 10VDC, 250mA | |
| 5VDC, 1mA | |
| Contact ratings | 500mA, 20VDC |
| 1 form A, 1 form B and 2 form A | 500mA, 10VDC |
| 1 form C (CO) | |
| Mechanical endurance | 100x10 ⁶ operations |

Coil Data

| | |
|-------------------------------------|-----------------------|
| Coil voltage range | 5 to 24VDC |
| Min./Max. energization duration | continuous |
| Max. coil temperature | 105° C |
| Thermal resistance | approximately 100°C/W |
| Coil insulation system according UL | class A |

Insulation Data

| | |
|-----------------------------------|------------------------------|
| Initial dielectric strength | 250VDC, |
| between open contacts | 175VDC |
| form A (NO) and form B (NC) | 500VDC |
| form C (CO) | |
| between contact and coil | |
| between adjacent contacts | |
| 2 form A (NO) of JWD only | |
| Initial insulation resistance | 10 ¹⁰ Ω at 100VDC |
| between insulated elements | |
| Capacitance between open contacts | typ. 0.5pF |

Other Data

| | |
|--|--|
| Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content | refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter |
| Ambient temperature | -35°C to +85°C |
| Category of environmental protection | RTIII -wash tight |
| IEC 61810 | |
| Vibration resistance (functional) | 20g, 10 to 2000 Hz |
| Shock resistance (functional), 3 planes, half sine pulse, 8ms | |
| form A (NO) | 100g |
| form B (NC) and form C (CO) | 50g |
| Terminal type | PCB-THT |
| Mounting position | any |
| Weight | approximately 2.3g (0.08 oz.) |
| Resistance to soldering heat THT | |
| IEC 60068-2-20, wave solder | max. 260°C/10s |
| Ultrasonic cleaning | no |
| Conformal coating | yes |
| Packaging/unit | tray/50 pcs., bundle/250 pcs., box/500 pcs. |

JWD/JWS Series Reed Relays (Continued)

Terminal assignment

TOP view on component side of PCB



Note: Terminal numbers are for reference only and do not appear on relays.

Note: Magnetic shielding may be required between relays when they are placed in very close proximity to one another.

Dimensions

JWD Series



JWS Series



| Product code | Contacts | Max. rating | Diode | Coil voltage | Coil resistance ¹⁾ | Operate voltage | Coil power | Wiring diagram | Part number |
|--------------|---------------|-------------|-------|--------------|-------------------------------|-----------------|------------|----------------|-------------|
| JWD-107-1 | 1 form A, | 10W | No | 5/6VDC | 500ohm | 3.8VDC | 50/72mW | 1 | 1393771-3 |
| JWD-107-5 | 1 NO contact | | Yes | 5/6VDC | 500ohm | 3.8VDC | 50/72mW | 1 | 1393771-5 |
| JWD-107-3 | | | No | 12VDC | 1200ohm | 9.6VDC | 120mW | 1 | 1393771-4 |
| JWD-107-7 | | | Yes | 12VDC | 1200ohm | 9.6VDC | 120mW | 1 | 1393771-6 |
| JWD-171-5 | | | No | 24VDC | 2150ohm | 19.2VDC | 268mW | 2 | 2-1393771-0 |
| JWD-171-10 | | | Yes | 24VDC | 2150ohm | 19.2VDC | 268mW | 2 | 1393771-7 |
| JWD-171-21 | 2 form A, | | No | 5/6VDC | 200ohm | 3.8VDC | 125/180mW | 3 | 1-1393771-4 |
| JWD-171-25 | 2 NO contacts | | Yes | 5/6VDC | 200ohm | 3.8VDC | 125/180mW | 3 | 1-1393771-7 |
| JWD-171-23 | | | No | 12VDC | 500ohm | 9.6VDC | 288mW | 3 | 1-1393771-5 |
| JWD-171-27 | | | Yes | 12VDC | 500ohm | 9.6VDC | 288mW | 3 | 1-1393771-8 |
| JWD-171-24 | | | No | 24VDC | 2200ohm | 19.2VDC | 262mW | 3 | 1-1393771-6 |
| JWD-171-28 | | | Yes | 24VDC | 2200ohm | 19.2VDC | 262mW | 3 | 1-1393771-9 |
| JWD-171-12 | 1 form B, | | No | 5/6VDC | 500ohm | 3.8VDC | 50/72mW | 4 | 1393771-8 |
| JWD-171-17 | 1 NCO contact | | Yes | 5/6VDC | 500ohm | 3.8VDC | 50/72mW | 4 | 1-1393771-1 |
| JWD-171-14 | | | No | 12VDC | 1200ohm | 9.6VDC | 120mW | 4 | 1393771-9 |
| JWD-171-19 | | | Yes | 12VDC | 1200ohm | 9.6VDC | 120mW | 4 | 1-1393771-2 |
| JWD-171-15 | | | No | 24VDC | 2200ohm | 19.2VDC | 262mW | 4 | 1-1393771-0 |
| JWD-171-20 | | | Yes | 24VDC | 2200ohm | 19.2VDC | 262mW | 4 | 1-1393771-3 |
| JWD-172-1 | 1 form C, | 3W | No | 5/6VDC | 200ohm | 3.8VDC | 125/180mW | 5 | 2-1393771-1 |
| JWD-172-5 | 1 CO contact | | Yes | 5/6VDC | 200ohm | 3.8VDC | 125/180mW | 5 | 2-1393771-9 |
| JWD-172-3 | | | No | 12VDC | 500ohm | 9.6VDC | 288mW | 5 | 2-1393771-7 |
| JWD-172-7 | | | Yes | 12VDC | 500ohm | 9.6VDC | 288mW | 5 | 3-1393771-0 |
| JWD-172-4 | | | No | 24VDC | 2200ohm | 19.2VDC | 262mW | 5 | 2-1393771-8 |
| JWD-172-8 | | | Yes | 24VDC | 2200ohm | 19.2VDC | 262mW | 5 | 3-1393771-1 |
| JWD-172-155 | | | No | 5/6VDC | 200ohm | 3.8VDC | 125/180mW | 6 | 2-1393771-2 |
| JWD-172-159 | | | Yes | 5/6VDC | 200ohm | 3.8VDC | 125/180mW | 6 | 2-1393771-4 |
| JWD-172-161 | | | Yes | 12VDC | 1000ohm | 9.6VDC | 144mW | 6 | 2-1393771-5 |
| JWD-172-158 | | | No | 24VDC | 2150ohm | 19.2VDC | 268mW | 6 | 2-1393771-3 |
| JWD-172-162 | | | Yes | 24VDC | 2150ohm | 19.2VDC | 268mW | 6 | 2-1393771-6 |
| JWS-117-1 | 1 form A, | 10W | No | 5VDC | 500ohm | 3.8VDC | 50mW | 7 | 3-1393771-2 |
| JWS-117-6 | 1 NO contact | | Yes | 5VDC | 500ohm | 3.8VDC | 50mW | 7 | 3-1393771-8 |
| JWS-117-3 | | | No | 12VDC | 530ohm | 9.6VDC | 272mW | 7 | 3-1393771-4 |
| JWS-117-8 | | | Yes | 12VDC | 530ohm | 9.6VDC | 272mW | 7 | 3-1393771-6 |
| JWS-117-18 | | | Yes | 12VDC | 1850ohm | 9.6VDC | 78mW | 7 | 3-1393771-3 |
| JWS-117-5 | | | No | 24VDC | 2150ohm | 19.2VDC | 268mW | 7 | 3-1393771-5 |

1) Coil resistance ±10%.



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

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.