

**Features**

- 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.
- Optional coil suppression diode.

**Contact Data @25°C**

**Arrangements:** 1 Form A (SPST - NO) on JWD & JWS. 1 Form B (SPST - NC), 1 Form C (SPDT) and 2 Form A (DPST-NO) on JWD only.

**Material:** Ruthenium.

**Expected Mechanical Life:** 100 million operations.

**Expected Electrical Life:**

	Resistive Load	End of Life Criteria	No. of Operations
Forms A & B	20VDC, 500mA	500mV Loss	1 x 10 <sup>6</sup>
	20VDC, 250mA	500mV Loss	20 x 10 <sup>6</sup>
	Low Level (5VDC, 1mA)	50 Ohms	100 x 10 <sup>6</sup>
Form C	12VDC, 500mA	500mV Loss	1 x 10 <sup>6</sup>
	10VDC, 10mA	50 Ohms	25 x 10 <sup>6</sup>
	Low Level (5VDC, 1mA)	50 Ohms	100 x 10 <sup>6</sup>

**Contact Ratings:**

**Maximum Switched Voltage:** 100VDC for Forms A & B; 28VDC for Form C.

**Maximum Switched Current:** 500mA for all models.

**Maximum Switched Power:** 10W for Forms A & B; 3W for Form C.

**Initial Contact Resistance:** 200 milliohms, max. at 10mA, 6VDC.

**Initial Dielectric Strength**

**Between Open Contacts:** 250VDC for Forms A & B; 175VDC for Form C.

**Between Contacts and Coil:** 500VDC.

**Initial Insulation resistance**

**Between Mutually Insulated Conductors:** 10<sup>10</sup> ohms at 100VDC.

**Coil Data @25°C**

See Ordering Information table.

**Operate Data @25°C**

**Operate Time (Including Bounce)†:** 1.5 ms, max.

**Release Time (Including Bounce)†:** 0.5 ms, max., for Forms A & B; 3.0 ms, max., for Form C.

† At or from Nominal Coil Voltage.

**Environmental Data**

**Temperature Range:** -35°C to +85°C.

**Shock:** 100 g, max., in three planes for 8 ms, 1/2 wave pulse.

**Vibration:** 20 g, max., between 10 and 2,000 Hz.

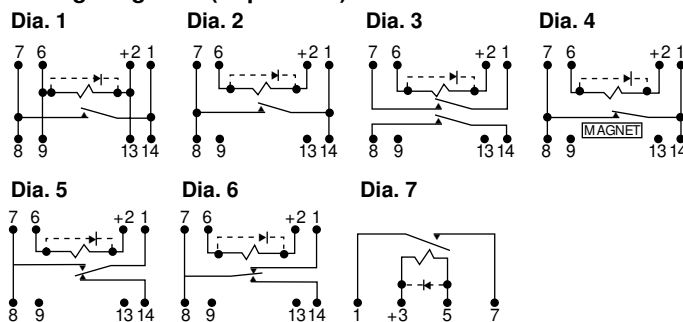
**Mechanical Data**

**Termination:** Printed circuit terminals on 0.100" (2.54mm) grid centers.

**Enclosure Type:** Black molded epoxy package.

**Weight:** 0.08 oz. (2.3g) approximately.

**Wiring Diagrams (Top Views)**



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

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

Dimensions are shown for reference purposes only.

Dimensions are in inches over (millimeters) unless otherwise specified.

# JWD/JWS series

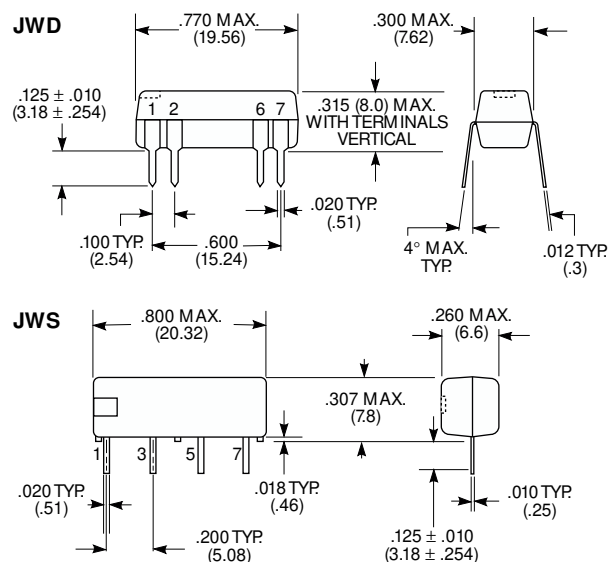
## Dual In-Line Package & Single In-Line Package Dry Reed Relays

File E29244 File LR81479

**Ordering Information – Boldface items are more likely to be stocked.**

Relay Part No.	Diode	Nom. Volt- age (VDC)	Resistance ±10% (Ohms)	Must Operate Voltage (VDC)	Must Release Voltage (VDC)	Max. Volt- age (VDC)	Nom. Coil Power (mW)	Wiring Dia. No.
<b>JWD (DIP units) with 1 Form A (SPST-NO) contacts rated 10W max.</b>								
JWD-107-1	No	5/6	500	3.8	0.5	19	50/72	1
JWD-107-5	Yes	5/6	500	3.8	0.5	19	50/72	1
JWD-107-3	No	12	1,200	9.6	1.0	19	120	1
JWD-107-7	Yes	12	1,200	9.6	1.0	19	120	1
JWD-171-5	No	24	2,150	19.2	2.0	40	268	2
JWD-171-10	Yes	24	2,150	19.2	2.0	40	268	2
<b>JWD (DIP units) with 2 Form A (DPST-NO) contacts rated 10W max.</b>								
JWD-171-21	No	5/6	200	3.8	0.5	14	125/180	3
JWD-171-25	Yes	5/6	200	3.8	0.5	14	125/180	3
JWD-171-23	No	12	500	9.6	1.0	19	288	3
JWD-171-27	Yes	12	500	9.6	1.0	19	288	3
JWD-171-24	No	24	2,200	19.2	2.0	40	262	3
JWD-171-28	Yes	24	2,200	19.2	2.0	40	262	3
<b>JWD (DIP units) with 1 Form B (SPST-NC) contacts rated 10W max.</b>								
JWD-171-12	No	5/6	500	3.8	0.5	7	50/72	4
JWD-171-17	Yes	5/6	500	3.8	0.5	7	50/72	4
JWD-171-14	No	12	1,200	9.6	1.0	16	120	4
JWD-171-19	Yes	12	1,200	9.6	1.0	16	120	4
JWD-171-15	No	24	2,200	19.2	2.0	40	262	4
JWD-171-20	Yes	24	2,200	19.2	2.0	40	262	4
<b>JWD (DIP units) with 1 Form C (SPDT) contacts rated 3W max.</b>								
JWD-172-1	No	5/6	200	3.8	0.5	12	125/180	5
JWD-172-5	Yes	5/6	200	3.8	0.5	12	125/180	5
JWD-172-3	No	12	500	9.6	1.0	19	288	5
JWD-172-7	Yes	12	500	9.6	1.0	19	288	5
JWD-172-4	No	24	2,200	19.2	2.0	38	262	5
JWD-172-8	Yes	24	2,200	19.2	2.0	38	262	5
JWD-172-155	No	5/6	200	3.8	0.5	12	125/180	6
JWD-172-159	Yes	5/6	200	3.8	0.5	12	125/180	6
JWD-172-157	No	12	1,000	9.6	1.0	19	144	6
JWD-172-161	Yes	12	1,000	9.6	1.0	19	144	6
JWD-172-158	No	24	2,150	19.2	2.0	38	268	6
JWD-172-162	Yes	24	2,150	19.2	2.0	38	268	6
<b>JWS (SIP units) with 1 Form A (SPST-NO) contacts rated 10W max.</b>								
JWS-117-1	No	5	500	3.8	0.5	16	50	7
JWS-117-6	Yes	5	500	3.8	0.5	16	50	7
JWS-117-3	No	12	530	9.6	1.0	19	272	7
JWS-117-8	Yes	12	530	9.6	1.0	19	272	7
JWS-117-13	No	12	1,850	9.6	1.0	30	78	7
JWS-117-18	Yes	12	1,850	9.6	1.0	30	78	7
JWS-117-5	No	24	2,150	19.2	2.0	36	268	7
JWS-117-10	Yes	24	2,150	19.2	2.0	36	268	7

**Outline Dimensions**



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

Specifications and availability subject to change.

www.tycoelectronics.com  
Technical support:  
Refer to inside back cover.