

#### **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.

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.

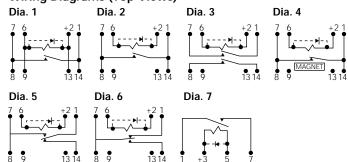
# Mechanical Data

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.

# JWD/JWS series

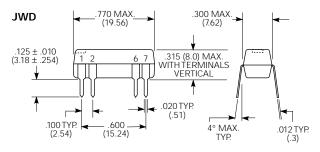
# Dual In-Line Package & Single In-Line Package **Dry Reed Relays**

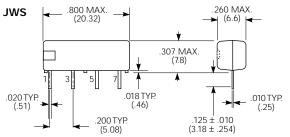
**A** File E29244 **File LR81479** 

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

Relay Part No. Diode Volt- age (VDC) tance ±10% (VDC) Operate Voltage (VDC) Release Voltage age (VDC) Coil Power (MW)   JWD (DIP units) with 1 Form A (SPST-NO) contacts rated 10W max.   JWD-107-1 No 5/6 500 3.8 0.5 19 50/72   JWD-107-3 No 12 1,200 9.6 1.0 19 120   JWD-107-7 Yes 12 1,200 9.6 1.0 19 120   JWD-171-5 No 24 2,150 19.2 2.0 40 268   JWD-171-10 Yes 24 2,150 19.2 2.0 40 268	1 1 1 1 2 2				
JWD (DIP units) with 1 Form A (SPST-NO) contacts rated 10W max.   JWD-107-1 No 5/6 500 3.8 0.5 19 50/72   JWD-107-5 Yes 5/6 500 3.8 0.5 19 50/72   JWD-107-3 No 12 1,200 9.6 1.0 19 120   JWD-107-7 Yes 12 1,200 9.6 1.0 19 120   JWD-171-5 No 24 2,150 19.2 2.0 40 268	1 1 1 2				
JWD-107-5 Yes 5/6 500 3.8 0.5 19 50/72   JWD-107-3 No 12 1,200 9.6 1.0 19 120   JWD-107-7 Yes 12 1,200 9.6 1.0 19 120   JWD-107-15 No 24 2,150 19.2 2.0 40 268	1 1 1 2				
JWD-107-3 No 12 1,200 9.6 1.0 19 120   JWD-107-7 Yes 12 1,200 9.6 1.0 19 120   JWD-171-5 No 24 2,150 19.2 2.0 40 268	1 1 2				
JWD-107-7 Yes 12 1,200 9.6 1.0 19 120   JWD-171-5 No 24 2,150 19.2 2.0 40 268	1 2				
<b>JWD-171-5</b> No 24 2,150 19.2 2.0 40 268	2				
JWD (DIP units) with 2 Form A (DPST-NO) contacts rated 10W max.					
JWD-171-21 No 5/6 200 3.8 0.5 14 125/180	3				
<b>JWD-171-25</b> Yes   5/6   200   3.8   0.5   14   125/180	3				
JWD-171-23 No 12 500 9.6 1.0 19 288   100 12 100 <td>3</td>	3				
JWD-171-27 Yes 12 500 9.6 1.0 19 288   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				
JWD (DIP units) with 1 Form B (SPST-NC) contacts rated 10W max.					
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   JWD-171-15 No 24 2,200 19.2 2.0 40 262	4				
JWD-171-13 No 24 2,200 19.2 2.0 40 262 JWD-171-20 Yes 24 2,200 19.2 2.0 40 262	4				
JWD (DIP units) with 1 Form C (SPDT) contacts rated 3W max.					
JWD-172-1 No 5/6 200 3.8 0.5 12 125/180	5				
<b>JWD-172-5</b> 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   JWD-172-4 No 24 2.200 19.2 2.0 38 262	5				
JWD-172-4 No 24 2,200 19.2 2.0 38 262   JWD-172-8 Yes 24 2,200 19.2 2.0 38 262	5 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   JWD-172-158 No 24 2,150 19.2 2.0 38 268	6				
JWD-172-156 NO 24 2,150 19.2 2.0 38 268 38 268	6				
JWS (SIP units) with 1 Form A (SPST-NO) contacts rated 10W max.					
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   JWS-117-13 No 12 1.850 9.6 1.0 30 78	7 7				
JWS-117-13	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**





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