

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	t
Contact Data	
Contact arrangement	
JWD and JWS	1 form A (NO) contact
JWD only	1 form B (NC), 1 form C (CO),
	2 form A (NO)
Rated voltage	
1 form A, 1 form B and 2 form A	20VDC, 500mA
1 form C (CO)	10 VDC, 500mA and 10VDC, 10mA
Max. switching voltage	
1 form A, 1 form B and 2 form A	100VDC
1 form C (CO)	28VDC
Rated current	
1 form A, 1 form B and 2 form A	500mA, 20VDC
1 form C (CO)	500mA, 10VDC
Limiting making current	500mA
Limiting breaking current	500mA
Switching power	
form A (NO) and form B (NC)	10W
form C (CO)	3W
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. bour form A (NO) and form B (NC)	1.5/0.5ms
form C (CO)	1.5/3.0ms
Electrical endurance	1.3/3.0(1)8
form A (NO) and form B (NC), resis	etive load ±25°C
20VDC, 500mA	1x10 ⁶ ops.
20VDC, 250mA	20x10 ⁶ ops.
5VDC, 1mA	100x10 ⁶ ops.
form C (CO) contact, resistive load	•
10VDC, 500mA	1x10 ⁶ ops.
10VDC, 250mA	20x10 ⁶ ops.
5VDC, 1mA	100x10 ⁶ ops.
Contact ratings	Teame oper
1 form A. 1 form B and 2 form A	500mA, 20VDC
1 form C (CO)	500mA, 10VDC
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		
between open contacts		
form A (NO) and form B (NC)	250VDC,	
form C (CO)	175VDC	
between contact and coil	500VDC	
between adjacent contacts		
2 form A (NO) of JWD only	500VDC	
Initial insulation resistance		
between insulated elements	10 ¹⁰ Ω at 100VDC	
Capacitance between open contacts	typ. 0.5pF	

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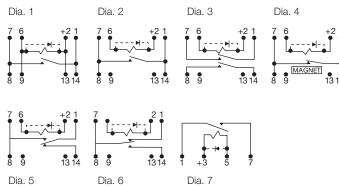
Material compliance: EU RoHS/ELV, C	nina RohS, REACH, Haiogen content				
refer to the Product Compliance Support Center					
www.te.com/customersupport/rohssupportc					
Ambient temperature	-35°C to +85°C				
Category of environmental protection					
IEC 61810	RTIII -wash tight				
Vibration resistance (functional)	20g, 10 to 2000 Hz				
Shock resistance (functional), 3 planes	s, 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)

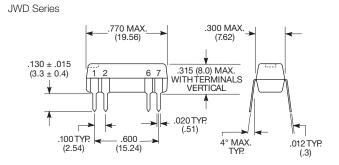
Terminal assignment

TOP view on component side of PCB

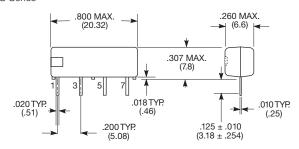


Note: Terminal numbers are for reference only and do not appear on relays.

Dimensions



JWS Series



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

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%.