

JWS-117-3

✓ ACTIVE

Potter & Brumfield | Potter & Brumfield JWD Series

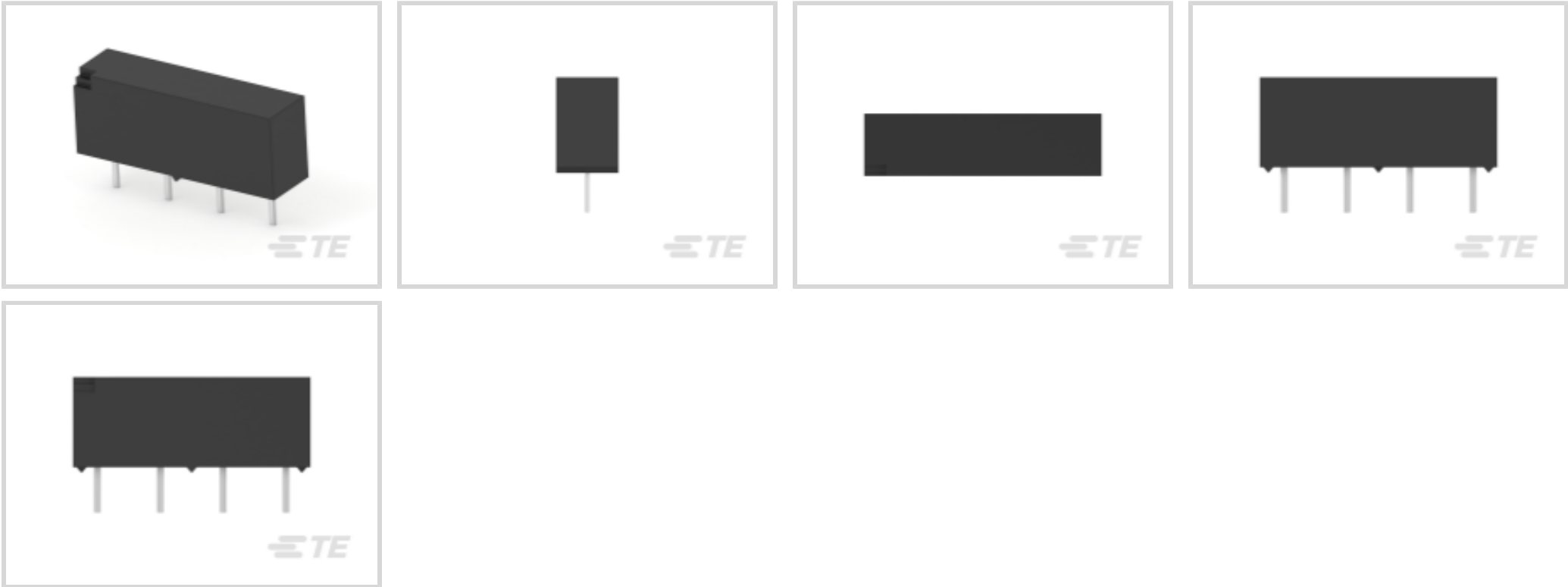
TE Internal #: 3-1393771-4

Signal Relays, 20 VDC Contact Voltage, 80 mW Coil Power (DC),  
Printed Circuit Board, PCB-THT, 12 VDC Coil Voltage, Potter &  
Brumfield JWD Series

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Relays, Contactors & Switches > Relays > Signal Relays



Contact Voltage Rating: **20 VDC**

Signal Relay Coil Power Rating (DC): **80 mW**

Isolation (HF Parameter): **-18dB @ 900MHz, -30dB @ 100MHz**

Insertion Loss (HF Parameter): **-.12dB @ 100MHz, -1.9dB @ 900MHz**

Signal Relay Mounting Type: **Printed Circuit Board**

Features

Product Type Features

|              |                            |
|--------------|----------------------------|
| Relay Type   | JWD/JWS Series Reed Relay  |
| Relay Style  | JWD/JWS Series Reed Relays |
| Product Type | Relay                      |

Electrical Characteristics

|                                                          |              |
|----------------------------------------------------------|--------------|
| Coil Power Rating Class                                  | 200 – 300 mW |
| Actuating System                                         | DC           |
| Insulation Initial Dielectric Between Open Contacts      | 250 Vrms     |
| Contact Limiting Short-Time Current                      | .5 A         |
| Insulation Initial Dielectric Between Contacts and Coil  | 500 Vrms     |
| Insulation Initial Dielectric Between Coil/Contact Class | 0 – 500 V    |
| Power Consumption                                        | 50 – 288 mW  |
| Insulation Initial Resistance                            | 1000 MΩ      |
| Contact Limiting Making Current                          | .5 A         |
| Coil Resistance                                          | 530 Ω        |



|                                              |                    |
|----------------------------------------------|--------------------|
| Contact Limiting Continuous Current          | .5 A               |
| Coil Type                                    | Monostable         |
| Contact Limiting Breaking Current            | .5 A               |
| Contact Switching Load (Min)                 | 10mA @ .01V        |
| Coil Special Features                        | UL Coil Insulation |
| Contact Voltage Rating                       | 20 VDC             |
| Signal Relay Coil Power Rating (DC)          | 80 mW              |
| Signal Relay Coil Voltage Rating             | 24 VAC             |
| Signal Relay Contact Switching Voltage (Max) | 100 VDC            |
| Signal Relay Coil Magnetic System            | Monostable, DC     |

Signal Characteristics

|                               |                                  |
|-------------------------------|----------------------------------|
| Isolation (HF Parameter)      | -18dB @ 900MHz, -30dB @ 100MHz   |
| Insertion Loss (HF Parameter) | -.12dB @ 100MHz, -1.9dB @ 900MHz |

Body Features

|        |                 |
|--------|-----------------|
| Weight | 2.3 g[.0811 oz] |
|--------|-----------------|

Contact Features

|                                     |                 |
|-------------------------------------|-----------------|
| Contact Plating Material            | Ruthenium       |
| Contact Current Class               | 0 – 2 A         |
| Contact Special Features            | Reed Contacts   |
| Signal Relay Terminal Type          | PCB-THT         |
| Signal Relay Contact Current Rating | 3 A             |
| Signal Relay Contact Arrangement    | 1 Form C (CO)   |
| Contact Material                    | Nickel-Titanium |
| Contact Number of Poles             | 1               |

Termination Features

|                  |              |
|------------------|--------------|
| Termination Type | Through Hole |
|------------------|--------------|

Mechanical Attachment

|                            |                       |
|----------------------------|-----------------------|
| Signal Relay Mounting Type | Printed Circuit Board |
|----------------------------|-----------------------|

Dimensions

|                          |                 |
|--------------------------|-----------------|
| Width Class (Mechanical) | 6 – 8 mm        |
| Width                    | 6.6 mm[.26 in]  |
| Height                   | 7.8 mm[.307 in] |



|                           |                  |
|---------------------------|------------------|
| Length Class (Mechanical) | 20 – 25 mm       |
| Length                    | 20.3 mm[.799 in] |
| Height Class (Mechanical) | 7 – 8 mm         |

Usage Conditions

|                                         |              |
|-----------------------------------------|--------------|
| Environmental Ambient Temperature (Max) | 85 °C[85 °F] |
| Environmental Ambient Temperature Class | 70 – 85°C    |
| Operating Temperature Range             | -35 – 85 °C  |

Operation/Application

|                  |          |
|------------------|----------|
| Performance Type | Standard |
|------------------|----------|

Packaging Features

|                  |                  |
|------------------|------------------|
| Packaging Method | Box & Tray, Tray |
|------------------|------------------|

Product Compliance

For compliance documentation, visit the product page on TE.com>

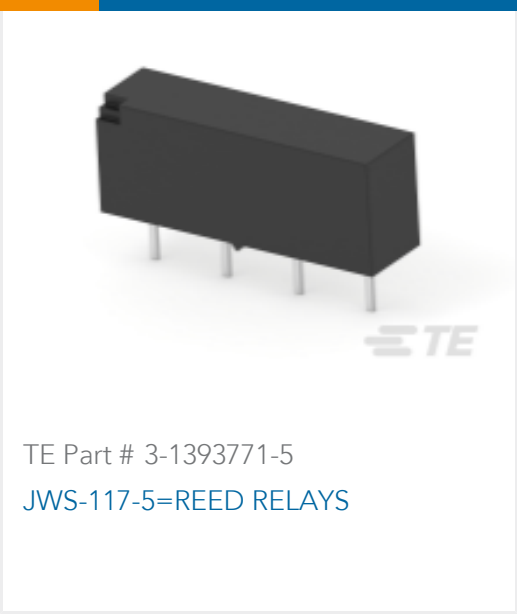
|                                               |                                                                                                                                |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| EU RoHS Directive 2011/65/EU                  | Compliant                                                                                                                      |
| EU ELV Directive 2000/53/EC                   | Compliant                                                                                                                      |
| China RoHS 2 Directive MIIT Order No 32, 2016 | No Restricted Materials Above Threshold                                                                                        |
| EU REACH Regulation (EC) No. 1907/2006        | Current ECHA Candidate List: JUNE 2022 (224)<br>Candidate List Declared Against: JUL 2021 (219)<br>Does not contain REACH SVHC |
| Halogen Content                               | BFR/CFR/PVC Free, but Br/Cl >900 ppm in other sources.                                                                         |
| Solder Process Capability                     | Wave solder capable to 260°C                                                                                                   |

Product Compliance Disclaimer

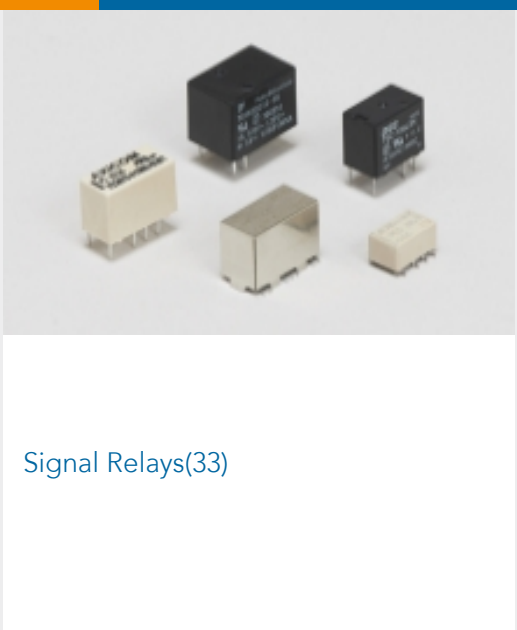
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) ‘Guidance on requirements for substances in articles’ posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>



## Compatible Parts



## Also in the Series | Potter & Brumfield JWD Series



## Documents

### CAD Files

#### 3D PDF

3D

#### Customer View Model

ENG\_CVM\_CVM\_3-1393771-4\_99.2d\_dxf.zip

English

#### Customer View Model

ENG\_CVM\_CVM\_3-1393771-4\_99.3d\_igs.zip

English

#### Customer View Model

ENG\_CVM\_CVM\_3-1393771-4\_99.3d\_stp.zip

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

### Datasheets & Catalog Pages

#### JWD/JWS Dual In-Line Package & Single In-Line Package Dry Reed Relays

English

### Product Specifications

#### Definitions, Handling, Processing, Testing and Use of Relays

English