# WEITRON

**WD01 thru WD10**

## Surface Mount
## Glass Passivated Bridge Rectifiers

**Lead(Pb)-Free**

**BRIDGE RECTIFIERS**
**0.8 AMPERES**
**100-1000 VOLTS**

**MINI-DIP**

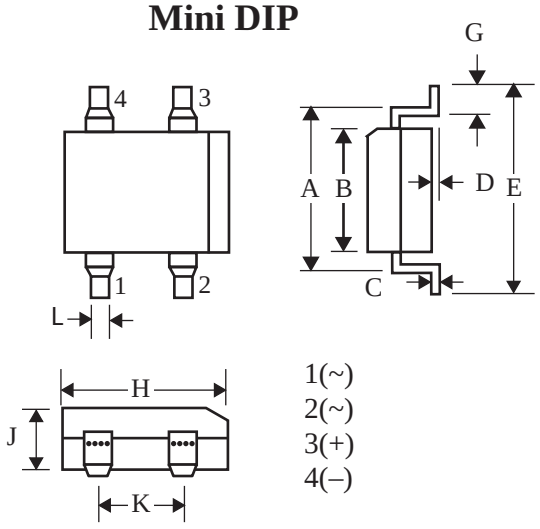
**Features:**
*Rating to 1000V PRV
*Ideal for printed circuit board
*Reliable low cost construction utilizing
molded plastic technique results in inexpensive product
*Lead tin plated copper

**Mecmanical Data**:
*Polarity:Symbol molded on body
*Weight: 0.0044 ounces,0.125 grams
*Mounting Position : Any

## MINI-DIP Outline Dimensions

Unit:mm

**Mini DIP**




| Dim | Min | Max |
|---|---|---|
| **A** | 5.00 | 5.50 |
| **B** | 4.00 | 4.25 |
| **C** | 0.009 | 0.35 |
| **D** | 0.076 | 0.33 |
| **E** | - | 7.00 |
| **G** | 0.58 | 1.10 |
| **H** | 4.50 | 4.90 |
| **J** | 2.30 | 2.80 |
| **K** | 2.40 | 3.01 |
| **L** | 0.45 | 0.75 |

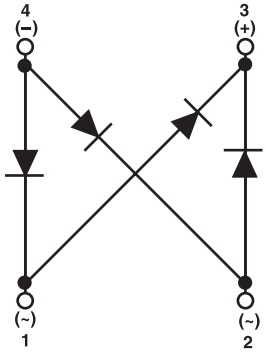
## Maximun Rating

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave ,60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

| Characteristics | Symbol | WD01 | WD02 | WD04 | WD06 | WD08 | WD10 | Units |
|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | $V_{RMS}$ | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | $V_{DC}$ | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Current (Note 1)@$T_A$=40°C | $I_{(AV)}$ | 0.8 | | | | | | Amps |
| Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | $I_{FSM}$ | 40 | | | | | | Amps |
| Peak Forward Voltage at 0.8A DC | $V_F$ | 1.1 | | | | | | Volts |
| Maximum DC Reverse Current @$T_J$=25°C at Rated DC Bolcking Voltage @$T_J$=125°C | $I_R$ | 5.0<br>500 | | | | | | µAmps |
| Tyical Junction Capacitance Per Element (Note2) | $C_J$ | 15 | | | | | | pF |
| Tyical Thermal Resistance (Note3) | $R_{\theta JA}$ | 75 | | | | | | °C/W |
| Operating Temperature Range | $T_j$ | -55 to +150 | | | | | | °C |
| Storage Temperature Range | $T_{stg}$ | -55 to +150 | | | | | | °C |

NOTES:1.Mounted on P.C. board.
2.Measured at1.0MHz and applied reverse voltage of 4.0V DC.
3.Thermal resistance junction to ambient.

## Device Marking

| Item | Marking | Eqivalent Circuit Diagram |
|---|---|---|
| WD01 | B1S |  |
| WD02 | B2S | |
| WD04 | B4S | |
| WD06 | B6S | |
| WD08 | B8S | |
| WD10 | B10S | |

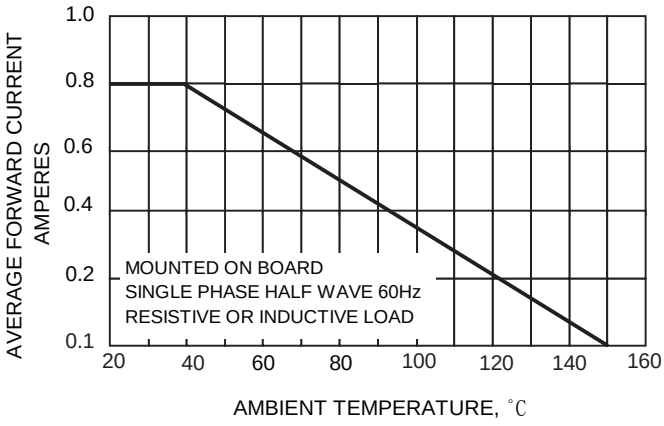



FIG.1-FORWARD CURRENT DERATING CURVE

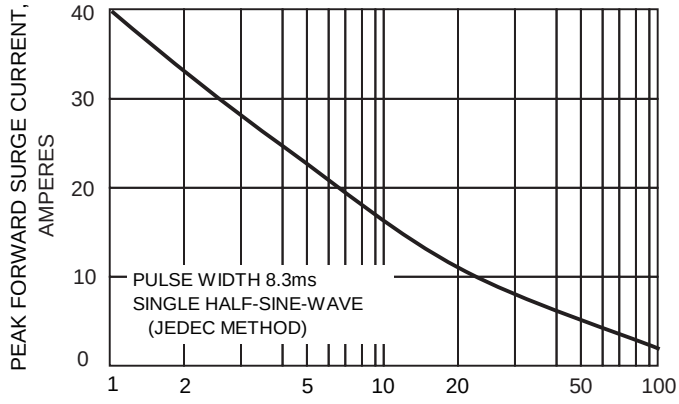



FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

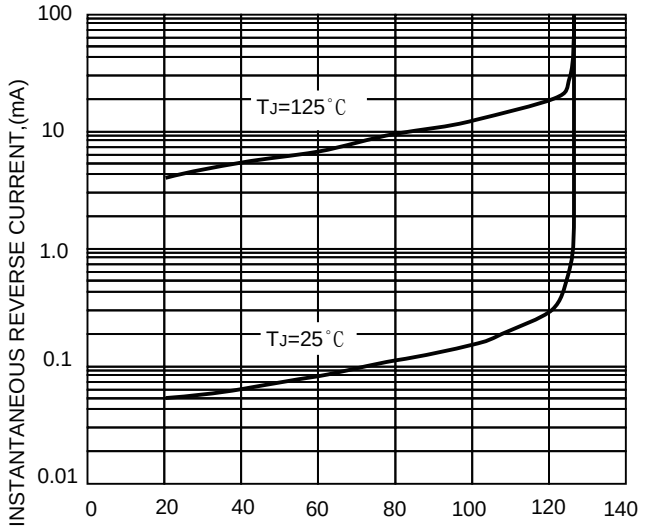



FIG.3-TYPICAL REVERSE CHARACTERISTICS

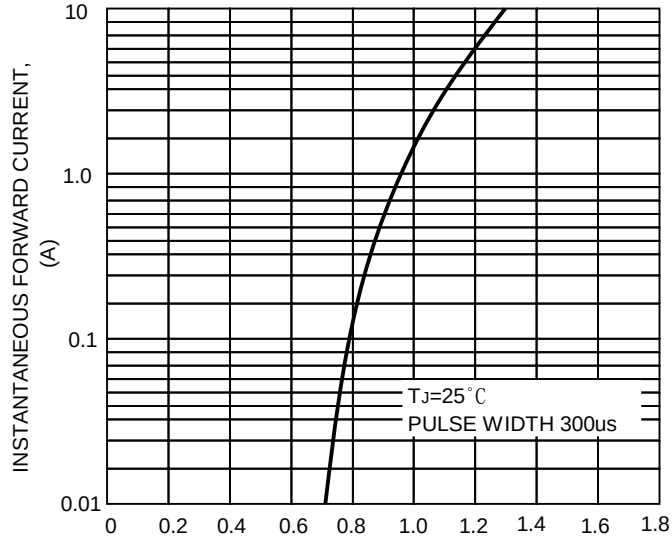



FIG.4-TYPICAL FORWARD CHARACTERISTICS

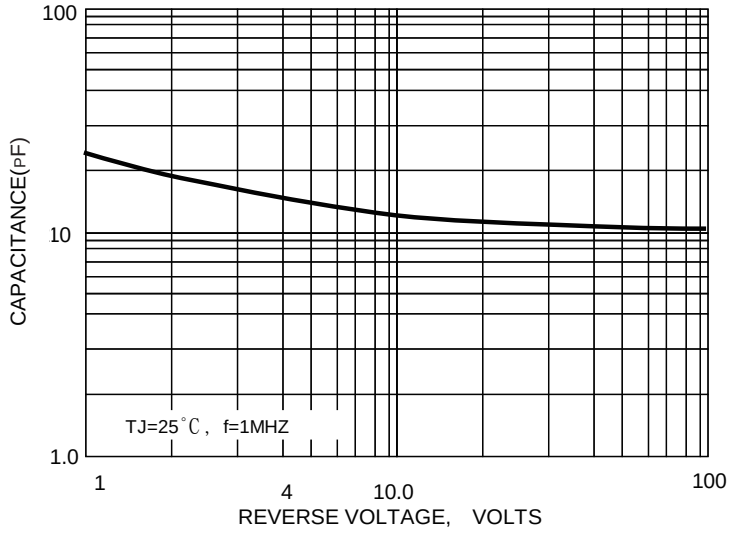



FIG.5-TYPICAL JUNCTION CAPACITANCE