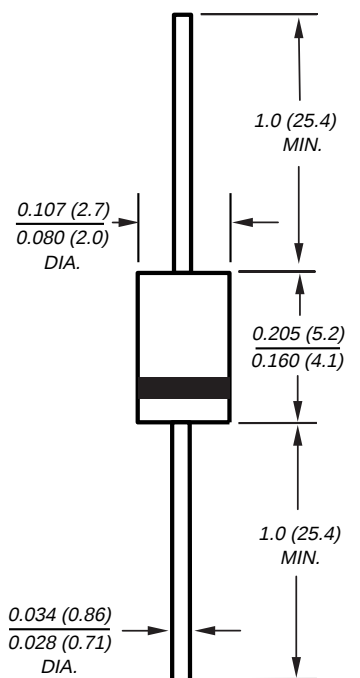
**TRANSZORB® Transient Voltage Suppressors****Peak Pulse Power** 400W  
**Stand-off Voltage** 5.8 to 376V**DO-204AL (DO-41 Plastic)**

Dimensions in inches and (millimeters)

**Features**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated junction
- 400W peak pulse power capability with a 10/1000 $\mu$ s waveform, repetition rate (duty cycle): 0.01%
- Excellent clamping capability
- Low incremental surge resistance
- Very fast response time
- Typical  $I_b$  less than 1 $\mu$ A above 10V rating
- High temperature soldering guaranteed: 265°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3 kg) tension

**Mechanical Data****Case:** JEDEC DO-204AL molded plastic body over passivated junction**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026**Polarity:** For unidirectional types the color band denotes the cathode, which is positive with respect to the anode under normal TVS operation**Mounting Position:** Any**Weight:** 0.012oz., 0.3g**Packaging Codes – Options (Antistatic):**

- 51 – 1K per Bulk box, 10K/carton
- 54 – 5.5K per 13" paper Reel (52mm horiz. tape), 16.5K/carton
- 73 – 3K per horiz. tape & Ammo box, 30K/carton

**Devices for Bidirectional Applications**

For bi-directional use add suffix letter "B" (e.g. BZW04P-6V4B). Electrical characteristics apply in both directions.

**Maximum Ratings and Thermal Characteristics** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

| Parameter                                                                                         | Symbol                            | Limit          | Unit |
|---------------------------------------------------------------------------------------------------|-----------------------------------|----------------|------|
| Peak pulse power dissipation with a 10/1000 $\mu$ s waveform (Note 1, Fig. 1)                     | P <sub>PPM</sub>                  | Minimum 400    | W    |
| Peak pulse current with a 10/1000 $\mu$ s waveform (Note 1)                                       | I <sub>PPM</sub>                  | See Next Table | A    |
| Steady state power dissipation at $T_L = 75^\circ\text{C}$ , lead lengths 0.375" (9.5mm) (Note 2) | P <sub>M(AV)</sub>                | 1.0            | W    |
| Peak forward surge current, 8.3ms single half sine-wave unidirectional only (Note 3)              | I <sub>FSM</sub>                  | 40             | A    |
| Maximum instantaneous forward voltage at 25A for unidirectional only (Note 4)                     | V <sub>F</sub>                    | 3.5/5.0        | V    |
| Operating junction and storage temperature range                                                  | T <sub>J</sub> , T <sub>STG</sub> | -55 to +175    | °C   |

**Notes:** (1) Non-repetitive current pulse, per Fig.3 and derated above  $T_A = 25^\circ\text{C}$  per Fig. 2

(2) Mounted on copper pad area of 1.6 x 1.6" (40 x 40mm) per Fig. 5

(3) Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum

(4)  $V_F = 3.5\text{V}$  for BZW04P(-)188 & below;  $V_F = 5.0\text{V}$  for BZW04P(-)213 & above

# BZW04P-5V8 thru BZW04-376



Vishay Semiconductors  
formerly General Semiconductor

## Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

| Part Number    |               | Breakdown Voltage<br>V <sub>BR</sub> at I <sub>T</sub> <sup>(1)</sup><br>(V) |      | Test<br>Current<br>I <sub>T</sub><br>(mA) | Stand-off<br>Voltage<br>V <sub>WM</sub><br>(Volts) | Maximum<br>Reverse<br>Leakage<br>at V <sub>WM</sub><br>I <sub>D</sub> (μA) <sup>(4)</sup> | Maximum<br>Peak Pulse<br>Current<br>I <sub>PPM</sub><br>(Amps) <sup>(2)</sup> | Maximum<br>Clamping<br>Voltage at<br>I <sub>PPM</sub><br>V <sub>C</sub> (Volts) | Maximum<br>Temperature<br>Coefficient<br>of V <sub>BR</sub><br>(% / °C) |
|----------------|---------------|------------------------------------------------------------------------------|------|-------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Unidirectional | Bidirectional | Min.                                                                         | Max. |                                           |                                                    |                                                                                           |                                                                               |                                                                                 |                                                                         |
| BZW04P5V8      | BZW04P5V8B    | 6.45                                                                         | 7.48 | 10.0                                      | 5.80                                               | 1000                                                                                      | 38.0                                                                          | 10.5                                                                            | 0.057                                                                   |
| BZW04-5V8      | BZW04-5V8B    | 6.45                                                                         | 7.14 | 10.0                                      | 5.80                                               | 1000                                                                                      | 38.0                                                                          | 10.5                                                                            | 0.057                                                                   |
| BZW04P6V4      | BZW04P6V4B    | 7.13                                                                         | 8.25 | 10.0                                      | 6.40                                               | 500                                                                                       | 35.4                                                                          | 11.3                                                                            | 0.061                                                                   |
| BZW04-6V4      | BZW04-6V4B    | 7.13                                                                         | 7.88 | 10.0                                      | 6.40                                               | 500                                                                                       | 35.4                                                                          | 11.3                                                                            | 0.061                                                                   |
| BZW04P7V0      | BZW04P7V0B    | 7.79                                                                         | 9.02 | 10.0                                      | 7.02                                               | 200                                                                                       | 33.0                                                                          | 12.1                                                                            | 0.065                                                                   |
| BZW04-7V0      | BZW04-7V0B    | 7.79                                                                         | 8.61 | 10.0                                      | 7.02                                               | 200                                                                                       | 33.0                                                                          | 12.1                                                                            | 0.065                                                                   |
| BZW04P7V8      | BZW04P7V8B    | 8.65                                                                         | 10.0 | 1.0                                       | 7.78                                               | 50                                                                                        | 30.0                                                                          | 13.4                                                                            | 0.068                                                                   |
| BZW04-7V8      | BZW04-7V8B    | 8.65                                                                         | 9.55 | 1.0                                       | 7.78                                               | 50                                                                                        | 30.0                                                                          | 13.4                                                                            | 0.073                                                                   |
| BZW04P8V5      | BZW04P8V5B    | 9.50                                                                         | 11.0 | 1.0                                       | 8.55                                               | 10                                                                                        | 27.6                                                                          | 14.5                                                                            | 0.07                                                                    |
| BZW04-8V5      | BZW04-8V5B    | 9.50                                                                         | 10.5 | 1.0                                       | 8.55                                               | 10                                                                                        | 27.6                                                                          | 14.5                                                                            | 0.075                                                                   |
| BZW04P9V4      | BZW04P9V4B    | 10.5                                                                         | 12.1 | 1.0                                       | 9.4                                                | 5.0                                                                                       | 25.7                                                                          | 15.6                                                                            | 0.075                                                                   |
| BZW04-9V4      | BZW04-9V4B    | 10.5                                                                         | 11.6 | 1.0                                       | 9.4                                                | 5.0                                                                                       | 25.7                                                                          | 15.6                                                                            | 0.075                                                                   |
| BZW0P10        | BZW0P10B      | 11.4                                                                         | 13.2 | 1.0                                       | 10.2                                               | 5.0                                                                                       | 24.0                                                                          | 16.7                                                                            | 0.078                                                                   |
| BZW04-10       | BZW04-10B     | 11.4                                                                         | 12.6 | 1.0                                       | 10.2                                               | 5.0                                                                                       | 24.0                                                                          | 16.7                                                                            | 0.078                                                                   |
| BZW04P11       | BZW04P11B     | 12.4                                                                         | 14.3 | 1.0                                       | 11.1                                               | 5.0                                                                                       | 22.0                                                                          | 18.2                                                                            | 0.081                                                                   |
| BZW04-11       | BZW04-11B     | 12.4                                                                         | 13.7 | 1.0                                       | 11.1                                               | 5.0                                                                                       | 22.0                                                                          | 18.2                                                                            | 0.081                                                                   |
| BZW04P13       | BZW04P13B     | 14.3                                                                         | 16.5 | 1.0                                       | 12.8                                               | 5.0                                                                                       | 19.0                                                                          | 21.2                                                                            | 0.084                                                                   |
| BZW04-13       | BZW04-13B     | 14.3                                                                         | 15.8 | 1.0                                       | 12.8                                               | 5.0                                                                                       | 19.0                                                                          | 21.2                                                                            | 0.084                                                                   |
| BZW04P14       | BZW04P14B     | 15.2                                                                         | 17.6 | 1.0                                       | 13.6                                               | 1.0                                                                                       | 17.8                                                                          | 22.5                                                                            | 0.086                                                                   |
| BZW04-14       | BZW04-14B     | 15.2                                                                         | 16.8 | 1.0                                       | 13.6                                               | 1.0                                                                                       | 17.8                                                                          | 22.5                                                                            | 0.086                                                                   |
| BZW04P15       | BZW04P15B     | 17.1                                                                         | 19.8 | 1.0                                       | 15.3                                               | 1.0                                                                                       | 16.0                                                                          | 25.2                                                                            | 0.088                                                                   |
| BZW04-15       | BZW04-15B     | 17.1                                                                         | 18.9 | 1.0                                       | 15.3                                               | 1.0                                                                                       | 16.0                                                                          | 25.2                                                                            | 0.088                                                                   |
| BZW04P17       | BZW04P17B     | 19.0                                                                         | 22.0 | 1.0                                       | 17.1                                               | 1.0                                                                                       | 14.5                                                                          | 27.7                                                                            | 0.090                                                                   |
| BZW04-17       | BZW04-17B     | 19.0                                                                         | 21.0 | 1.0                                       | 17.1                                               | 1.0                                                                                       | 14.5                                                                          | 27.7                                                                            | 0.090                                                                   |
| BZW04P19       | BZW04P19B     | 20.9                                                                         | 24.2 | 1.0                                       | 18.8                                               | 1.0                                                                                       | 13.0                                                                          | 30.6                                                                            | 0.092                                                                   |
| BZW04-19       | BZW04-19B     | 20.9                                                                         | 23.1 | 1.0                                       | 18.8                                               | 1.0                                                                                       | 13.0                                                                          | 30.6                                                                            | 0.092                                                                   |
| BZW04P20       | BZW04P20B     | 22.8                                                                         | 26.4 | 1.0                                       | 20.5                                               | 1.0                                                                                       | 12.0                                                                          | 33.2                                                                            | 0.094                                                                   |
| BZW04-20       | BZW04-20B     | 22.8                                                                         | 25.2 | 1.0                                       | 20.5                                               | 1.0                                                                                       | 12.0                                                                          | 33.2                                                                            | 0.094                                                                   |
| BZW04P23       | BZW04P23B     | 25.7                                                                         | 29.7 | 1.0                                       | 23.1                                               | 1.0                                                                                       | 10.7                                                                          | 37.5                                                                            | 0.096                                                                   |
| BZW04-23       | BZW04-23B     | 25.7                                                                         | 28.4 | 1.0                                       | 23.1                                               | 1.0                                                                                       | 10.7                                                                          | 37.5                                                                            | 0.096                                                                   |
| BZW04P26       | BZW04P26B     | 28.5                                                                         | 33.0 | 1.0                                       | 25.6                                               | 1.0                                                                                       | 9.6                                                                           | 41.5                                                                            | 0.097                                                                   |
| BZW04-26       | BZW04-26B     | 28.5                                                                         | 31.5 | 1.0                                       | 25.6                                               | 1.0                                                                                       | 9.6                                                                           | 41.5                                                                            | 0.097                                                                   |
| BZW04P28       | BZW04P28B     | 31.4                                                                         | 36.3 | 1.0                                       | 28.2                                               | 1.0                                                                                       | 8.8                                                                           | 45.7                                                                            | 0.098                                                                   |
| BZW04-28       | BZW04-28B     | 31.4                                                                         | 34.7 | 1.0                                       | 28.2                                               | 1.0                                                                                       | 8.8                                                                           | 45.7                                                                            | 0.098                                                                   |
| BZW04P31       | BZW04P31B     | 34.2                                                                         | 39.6 | 1.0                                       | 30.8                                               | 1.0                                                                                       | 8.0                                                                           | 49.9                                                                            | 0.099                                                                   |
| BZW04-31       | BZW04-31B     | 34.2                                                                         | 37.8 | 1.0                                       | 30.8                                               | 1.0                                                                                       | 8.0                                                                           | 49.9                                                                            | 0.099                                                                   |
| BZW04P33       | BZW04P33B     | 37.1                                                                         | 42.9 | 1.0                                       | 33.3                                               | 1.0                                                                                       | 7.4                                                                           | 53.9                                                                            | 0.100                                                                   |
| BZW04-33       | BZW04-33B     | 37.1                                                                         | 41.0 | 1.0                                       | 33.3                                               | 1.0                                                                                       | 7.4                                                                           | 53.9                                                                            | 0.100                                                                   |
| BZW04P37       | BZW04P37B     | 40.9                                                                         | 47.3 | 1.0                                       | 36.8                                               | 1.0                                                                                       | 6.7                                                                           | 59.3                                                                            | 0.101                                                                   |
| BZW04-37       | BZW04-37B     | 40.9                                                                         | 45.2 | 1.0                                       | 36.8                                               | 1.0                                                                                       | 6.7                                                                           | 59.3                                                                            | 0.101                                                                   |
| BZW04P40       | BZW04P40B     | 44.7                                                                         | 51.7 | 1.0                                       | 40.2                                               | 1.0                                                                                       | 6.2                                                                           | 64.8                                                                            | 0.101                                                                   |
| BZW04-40       | BZW04-40B     | 44.7                                                                         | 49.4 | 1.0                                       | 40.2                                               | 1.0                                                                                       | 6.2                                                                           | 64.8                                                                            | 0.101                                                                   |
| BZW04P44       | BZW04P44B     | 48.5                                                                         | 56.1 | 1.0                                       | 43.6                                               | 1.0                                                                                       | 5.7                                                                           | 70.1                                                                            | 0.102                                                                   |
| BZW04-44       | BZW04-44B     | 48.5                                                                         | 53.6 | 1.0                                       | 43.6                                               | 1.0                                                                                       | 5.7                                                                           | 70.1                                                                            | 0.102                                                                   |
| BZW04P48       | BZW04P48B     | 53.2                                                                         | 61.6 | 1.0                                       | 47.8                                               | 1.0                                                                                       | 5.2                                                                           | 77.0                                                                            | 0.103                                                                   |
| BZW04-48       | BZW04-48B     | 53.2                                                                         | 58.8 | 1.0                                       | 47.8                                               | 1.0                                                                                       | 5.2                                                                           | 77.0                                                                            | 0.103                                                                   |

**Electrical Characteristics (Con't.)** Ratings at 25°C ambient temperature unless otherwise specified.

| Part Number    |               | Breakdown Voltage<br>V <sub>(BR)</sub> at I <sub>T</sub> <sup>(1)</sup><br>(V) |      | Test<br>Current<br>I <sub>T</sub><br>(mA) | Stand-off<br>Voltage<br>V <sub>WM</sub><br>(Volts) | Maximum<br>Reverse<br>Leakage<br>at V <sub>WM</sub><br>I <sub>D</sub> (μA) <sup>(4)</sup> | Maximum<br>Peak Pulse<br>Current<br>I <sub>PPM</sub><br>(Amps) <sup>(2)</sup> | Maximum<br>Clamping<br>Voltage at<br>I <sub>PPM</sub><br>V <sub>C</sub> (Volts) | Maximum<br>Temperature<br>Coefficient<br>of V <sub>(BR)</sub><br>(% / °C) |
|----------------|---------------|--------------------------------------------------------------------------------|------|-------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------|
|                |               | Min.                                                                           | Max. |                                           |                                                    |                                                                                           |                                                                               |                                                                                 |                                                                           |
| Unidirectional | Bidirectional |                                                                                |      |                                           |                                                    |                                                                                           |                                                                               |                                                                                 |                                                                           |
| BZW04P53       | BZW04P53B     | 58.9                                                                           | 68.2 | 1.0                                       | 53.0                                               | 1.0                                                                                       | 4.7                                                                           | 85.0                                                                            | 0.104                                                                     |
| BZW04-53       | BZW04-53B     | 58.9                                                                           | 65.1 | 1.0                                       | 53.0                                               | 1.0                                                                                       | 4.7                                                                           | 85.0                                                                            | 0.104                                                                     |
| BZW04P58       | BZW04P58B     | 64.6                                                                           | 74.8 | 1.0                                       | 58.1                                               | 1.0                                                                                       | 4.3                                                                           | 92.0                                                                            | 0.104                                                                     |
| BZW04-58       | BZW04-58B     | 64.6                                                                           | 71.4 | 1.0                                       | 58.1                                               | 1.0                                                                                       | 4.3                                                                           | 92.0                                                                            | 0.104                                                                     |
| BZW04P64       | BZW04P64B     | 71.3                                                                           | 82.5 | 1.0                                       | 64.1                                               | 1.0                                                                                       | 3.9                                                                           | 103                                                                             | 0.105                                                                     |
| BZW04-64       | BZW04-64B     | 71.3                                                                           | 78.8 | 1.0                                       | 64.1                                               | 1.0                                                                                       | 3.9                                                                           | 103                                                                             | 0.105                                                                     |
| BZW04P70       | BZW04P70B     | 77.9                                                                           | 90.2 | 1.0                                       | 70.1                                               | 1.0                                                                                       | 3.5                                                                           | 113                                                                             | 0.105                                                                     |
| BZW04-70       | BZW04-70B     | 77.9                                                                           | 86.1 | 1.0                                       | 70.1                                               | 1.0                                                                                       | 3.5                                                                           | 113                                                                             | 0.105                                                                     |
| BZW04P78       | BZW04P78B     | 86.5                                                                           | 100  | 1.0                                       | 78.0                                               | 1.0                                                                                       | 3.2                                                                           | 125                                                                             | 0.105                                                                     |
| BZW04-78       | BZW04-78B     | 86.5                                                                           | 95.5 | 1.0                                       | 78.0                                               | 1.0                                                                                       | 3.2                                                                           | 125                                                                             | 0.105                                                                     |
| BZW04P85       | BZW04P85B     | 95.0                                                                           | 110  | 1.0                                       | 85.5                                               | 1.0                                                                                       | 2.9                                                                           | 137                                                                             | 0.106                                                                     |
| BZW04-85       | BZW04-85B     | 95.0                                                                           | 105  | 1.0                                       | 85.5                                               | 1.0                                                                                       | 2.9                                                                           | 137                                                                             | 0.106                                                                     |
| BZW04P94       | BZW04P94B     | 105                                                                            | 121  | 1.0                                       | 94.0                                               | 1.0                                                                                       | 2.6                                                                           | 152                                                                             | 0.107                                                                     |
| BZW04-94       | BZW04-94B     | 105                                                                            | 116  | 1.0                                       | 94.0                                               | 1.0                                                                                       | 2.6                                                                           | 152                                                                             | 0.107                                                                     |
| BZW04P102      | BZW04P102B    | 114                                                                            | 132  | 1.0                                       | 102                                                | 1.0                                                                                       | 2.4                                                                           | 165                                                                             | 0.107                                                                     |
| BZW04-102      | BZW04-102B    | 114                                                                            | 126  | 1.0                                       | 102                                                | 1.0                                                                                       | 2.4                                                                           | 165                                                                             | 0.107                                                                     |
| BZW04P110      | BZW04P110B    | 124                                                                            | 143  | 1.0                                       | 111                                                | 1.0                                                                                       | 2.2                                                                           | 179                                                                             | 0.107                                                                     |
| BZW04-110      | BZW04-110B    | 124                                                                            | 137  | 1.0                                       | 111                                                | 1.0                                                                                       | 2.2                                                                           | 179                                                                             | 0.107                                                                     |
| BZW04P128      | BZW04P128B    | 143                                                                            | 165  | 1.0                                       | 128                                                | 1.0                                                                                       | 2.0                                                                           | 207                                                                             | 0.108                                                                     |
| BZW04-128      | BZW04-128B    | 143                                                                            | 158  | 1.0                                       | 128                                                | 1.0                                                                                       | 2.0                                                                           | 207                                                                             | 0.108                                                                     |
| BZW04P136      | BZW04P136B    | 152                                                                            | 176  | 1.0                                       | 136                                                | 1.0                                                                                       | 1.8                                                                           | 219                                                                             | 0.108                                                                     |
| BZW404-136     | BZW404-136B   | 152                                                                            | 168  | 1.0                                       | 136                                                | 1.0                                                                                       | 1.8                                                                           | 219                                                                             | 0.108                                                                     |
| BZW04P145      | BZW04P145B    | 161                                                                            | 187  | 1.0                                       | 145                                                | 1.0                                                                                       | 1.7                                                                           | 234                                                                             | 0.108                                                                     |
| BZW04-145      | BZW04-145B    | 161                                                                            | 179  | 1.0                                       | 145                                                | 1.0                                                                                       | 1.7                                                                           | 234                                                                             | 0.108                                                                     |
| BZW04P154      | BZW04P154B    | 171                                                                            | 198  | 1.0                                       | 154                                                | 1.0                                                                                       | 1.6                                                                           | 246                                                                             | 0.108                                                                     |
| BZW04-154      | BZW04-154B    | 171                                                                            | 189  | 1.0                                       | 154                                                | 1.0                                                                                       | 1.6                                                                           | 246                                                                             | 0.108                                                                     |
| BZW04P171      | BZW04P171B    | 190                                                                            | 220  | 1.0                                       | 171                                                | 1.0                                                                                       | 1.5                                                                           | 274                                                                             | 0.108                                                                     |
| BZW04-171      | BZW04-171B    | 190                                                                            | 210  | 1.0                                       | 171                                                | 1.0                                                                                       | 1.5                                                                           | 274                                                                             | 0.108                                                                     |
| BZW04P188      | BZW04P188B    | 209                                                                            | 242  | 1.0                                       | 188                                                | 1.0                                                                                       | 1.4                                                                           | 301                                                                             | 0.108                                                                     |
| BZW04-188      | BZW04-188B    | 209                                                                            | 231  | 1.0                                       | 188                                                | 1.0                                                                                       | 1.4                                                                           | 301                                                                             | 0.108                                                                     |
| BZW04P213      | BZW04P213B    | 237                                                                            | 275  | 1.0                                       | 213                                                | 1.0                                                                                       | 1.5                                                                           | 344                                                                             | 0.110                                                                     |
| BZW04-213      | BZW04-213B    | 237                                                                            | 263  | 1.0                                       | 213                                                | 1.0                                                                                       | 1.5                                                                           | 344                                                                             | 0.110                                                                     |
| BZW04P239      | BZW04P239B    | 266                                                                            | 308  | 1.0                                       | 239                                                | 1.0                                                                                       | 1.5                                                                           | 384                                                                             | 0.110                                                                     |
| BZW04-239      | BZW04-239B    | 266                                                                            | 294  | 1.0                                       | 239                                                | 1.0                                                                                       | 1.5                                                                           | 384                                                                             | 0.110                                                                     |
| BZW04P256      | BZW04P256B    | 285                                                                            | 330  | 1.0                                       | 256                                                | 1.0                                                                                       | 1.2                                                                           | 414                                                                             | 0.110                                                                     |
| BZW04-256      | BZW04-256B    | 285                                                                            | 315  | 1.0                                       | 256                                                | 1.0                                                                                       | 1.2                                                                           | 414                                                                             | 0.110                                                                     |
| BZW04P273      | BZW04P273B    | 304                                                                            | 352  | 1.0                                       | 273                                                | 1.0                                                                                       | 1.2                                                                           | 438                                                                             | 0.110                                                                     |
| BZW04-273      | BZW04-273B    | 304                                                                            | 336  | 1.0                                       | 273                                                | 1.0                                                                                       | 1.2                                                                           | 438                                                                             | 0.110                                                                     |
| BZW04P299      | BZW04P299B    | 332                                                                            | 385  | 1.0                                       | 299                                                | 1.0                                                                                       | 0.90                                                                          | 482                                                                             | 0.110                                                                     |
| BZW04-299      | BZW04-299B    | 332                                                                            | 368  | 1.0                                       | 299                                                | 1.0                                                                                       | 0.90                                                                          | 482                                                                             | 0.110                                                                     |
| BZW04P342      | BZW04P342B    | 380                                                                            | 440  | 1.0                                       | 342                                                | 1.0                                                                                       | 0.90                                                                          | 548                                                                             | 0.110                                                                     |
| BZW04-342      | BZW04-342B    | 380                                                                            | 420  | 1.0                                       | 342                                                | 1.0                                                                                       | 0.90                                                                          | 548                                                                             | 0.110                                                                     |
| BZW04P376      | BZW04P376B    | 418                                                                            | 484  | 1.0                                       | 376                                                | 1.0                                                                                       | 0.80                                                                          | 603                                                                             | 0.110                                                                     |
| BZW04-376      | BZW04-376B    | 418                                                                            | 462  | 1.0                                       | 376                                                | 1.0                                                                                       | 0.80                                                                          | 603                                                                             | 0.110                                                                     |

Notes: (1) Pulse test:  $t_p \leq 50\text{ms}$ 

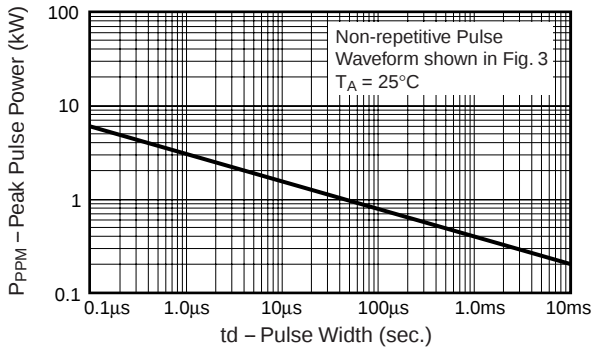
(2) Surge current waveform per Fig. 3 and derated per Fig. 2

(3) All terms and symbols are consistent with ANSI/IEEE C62.35

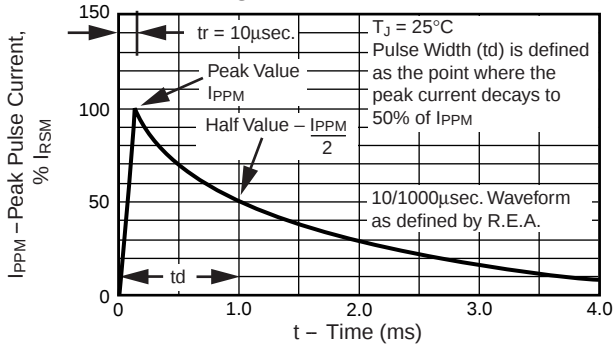
(4) For bidirectional types having V<sub>WM</sub> of 10 volts and less, the I<sub>D</sub> limit is doubled

## Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

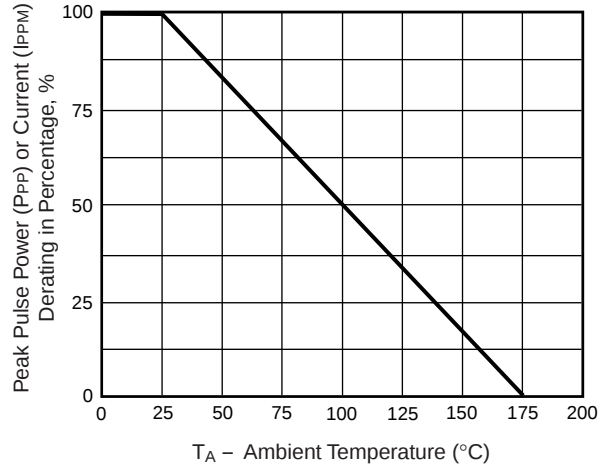
**Fig. 1 – Peak Pulse Power Rating Curve**



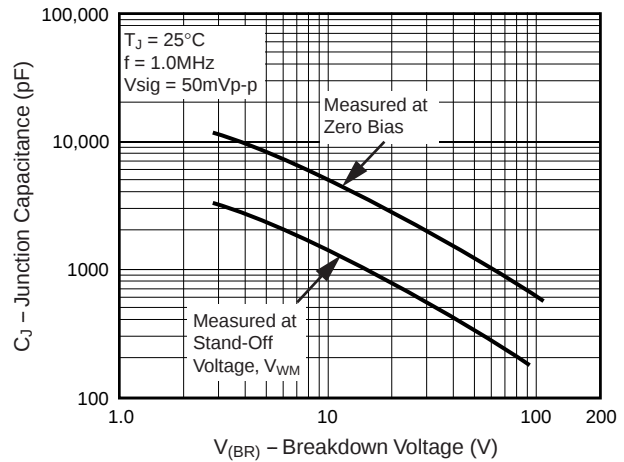
**Fig. 3 – Pulse Waveform**



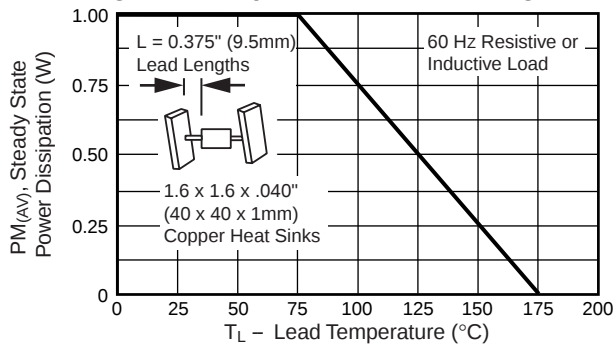
**Fig. 2 – Pulse Derating Curve**



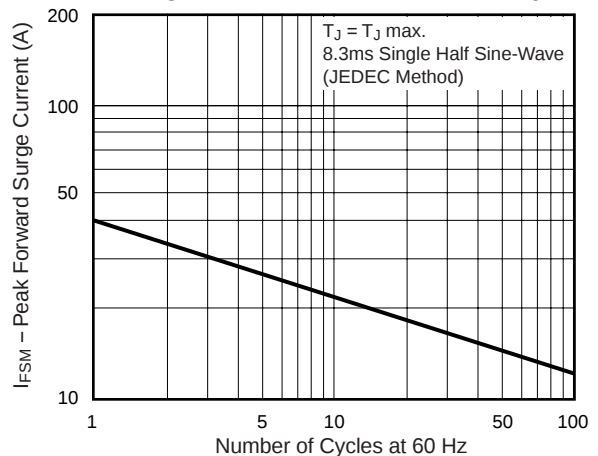
**Fig. 4 – Typical Junction Capacitance  
Uni-Directional**



**Fig. 5 – Steady State Power Derating Curve**



**Fig. 6 – Maximum Non-Repetitive Forward  
Surge Current Uni-Directional Only**



**Fig. 7 – Typical Reverse Leakage Characteristics**

