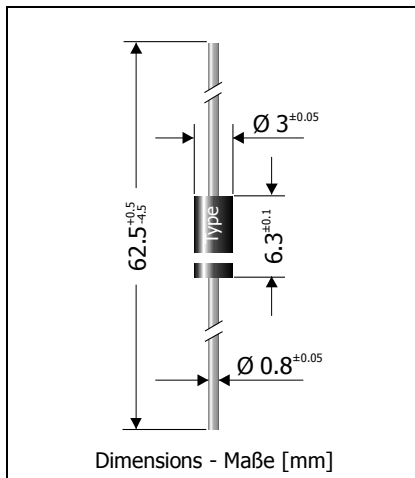


BZW06-5V8 ... BZW06-376B
**Unidirectional and bidirectional Transient Voltage Suppressor Diodes
Unidirektionale und bidirektionale Spannungs-Begrenzer-Dioden**

Version 2014-10-06



| | |
|---|--------------------|
| Peak pulse power dissipation Impuls-Verlustleistung | 600 W |
| Nominal stand-off voltage Nominale Sperrspannung | 5.8...376 V |
| Plastic case Kunststoffgehäuse | DO-15 (DO-204C) |
| Weight approx. Gewicht ca. | 0.4 g |
| Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert | |
| Standard packaging taped in ammo pack Standard Lieferform gegurtet in Ammo-Pack | |



For bidirectional types (add suffix "B"), electrical characteristics apply in both directions.
Für bidirektionale Dioden (ergänze Suffix "B") gelten die elektrischen Werte in beiden Richtungen.

Maximum ratings and Characteristics
Grenz- und Kennwerte

| | | | |
|--|--|----------------|--|
| Peak pulse power dissipation (10/1000 μ s waveform) Impuls-Verlustleistung (Strom-Impuls 10/1000 μ s) | $T_A = 25^\circ\text{C}$ | P_{PPM} | 600 W ¹⁾ |
| Steady state power dissipation Verlustleistung im Dauerbetrieb | $T_L = 75^\circ\text{C}$ | $P_{M(AV)}$ | 5 W |
| Peak forward surge current, 60 Hz half sine-wave Stoßstrom für eine 60 Hz Sinus-Halbwelle | $T_A = 25^\circ\text{C}$ | I_{FSM} | 100 A ²⁾ |
| Max. instantaneous forward voltage Augenblickswert der Durchlass-Spannung | $I_F = 50\text{ A}$ $V_{BR} \leq 200\text{ V}$ $V_{BR} > 200\text{ V}$ | V_F V_F | < 3.0 V ²⁾ < 6.5 V ²⁾ |
| Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur | | T_j T_s | -50...+175°C -50...+175°C |
| Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft | | R_{thA} | < 45 K/W |
| Thermal resistance junction to terminal Wärmewiderstand Sperrschicht – Anschluss | | R_{thL} | < 15 K/W |

- 1 Non-repetitive pulse see curve $I_{pp} = f(t) / P_{pp} = f(t)$
Höchstzulässiger Spitzenwert eines einmaligen Impulses, siehe Kurve $I_{pp} = f(t) / P_{pp} = f(t)$
- 2 Unidirectional diodes only – Nur für unidirektionale Dioden

Maximum ratings
Grenzwerte

| Type Typ | Stand-off voltage Sperrspannung | Max. rev. current Max. Sperrstrom at / bei V_{WM} | Breakdown voltage at $I_T = 1$ mA Abbruch-Spannung bei $I_T = 1$ mA) at / bei $I_T = 10$ mA | | Max. clamping voltage Max. Begrenzer-Spannung at / bei I_{PPM} (10/1000 μ s) | |
|-------------|------------------------------------|---|--|----------------|--|---------------|
| | V_{WM} [V] | I_D [μ A] | V_{BR} [V] | | V_C [V] | I_{PPM} [A] |
| BZW06-5V8 | 5.8 | 1000 | 6.8 \pm 5% | 6.45...7.14 *) | 10.5 | 57 |
| BZW06-6V4 | 6.4 | 500 | 7.5 \pm 5% | 7.13...7.88 *) | 11.3 | 53 |
| BZW06-7V0 | 7.02 | 200 | 8.2 \pm 5% | 7.79...8.61 *) | 12.1 | 50 |
| BZW06-7V8 | 7.78 | 50 | 9.1 \pm 5% | 8.65...9.55 | 13.4 | 45 |
| BZW06-8V5 | 8.55 | 10 | 10 \pm 5% | 9.5...10.5 | 14.5 | 41 |
| BZW06-9V4 | 9.4 | 5 | 11 \pm 5% | 10.5...11.6 | 15.6 | 38 |
| BZW06-10 | 10.2 | 5 | 12 \pm 5% | 11.4...12.6 | 16.7 | 36 |
| BZW06-11 | 11.1 | 5 | 13 \pm 5% | 12.4...13.7 | 18.2 | 33 |
| BZW06-13 | 12.8 | 5 | 15 \pm 5% | 14.3...15.8 | 21.2 | 28 |
| BZW06-14 | 13.6 | 5 | 16 \pm 5% | 15.2...16.8 | 22.5 | 27 |
| BZW06-15 | 15.3 | 5 | 18 \pm 5% | 17.1...18.9 | 25.2 | 24 |
| BZW06-17 | 17.1 | 5 | 20 \pm 5% | 19.0...21.0 | 27.7 | 22 |
| BZW06-19 | 18.8 | 5 | 22 \pm 5% | 20.9...23.1 | 30.6 | 20 |
| BZW06-20 | 20.5 | 5 | 24 \pm 5% | 22.8...25.2 | 33.2 | 18 |
| BZW06-23 | 23.1 | 5 | 27 \pm 5% | 25.7...28.4 | 37.5 | 16 |
| BZW06-26 | 25.6 | 5 | 30 \pm 5% | 28.5...31.5 | 41.5 | 14.5 |
| BZW06-28 | 28.2 | 5 | 33 \pm 5% | 31.4...34.7 | 45.7 | 13.1 |
| BZW06-31 | 30.8 | 5 | 36 \pm 5% | 34.2...37.8 | 49.9 | 12.0 |
| BZW06-33 | 33.3 | 5 | 39 \pm 5% | 37.1...41.0 | 53.9 | 11.1 |
| BZW06-37 | 36.8 | 5 | 43 \pm 5% | 40.9...45.2 | 59.3 | 10.1 |
| BZW06-40 | 40.2 | 5 | 47 \pm 5% | 44.7...49.4 | 64.8 | 9.3 |
| BZW06-44 | 43.6 | 5 | 51 \pm 5% | 48.5...53.6 | 70.1 | 8.6 |
| BZW06-48 | 47.8 | 5 | 56 \pm 5% | 53.2...58.8 | 77.0 | 7.8 |
| BZW06-53 | 53.0 | 5 | 62 \pm 5% | 58.9...65.1 | 85.0 | 7.1 |
| BZW06-58 | 58.1 | 5 | 68 \pm 5% | 64.6...71.4 | 92.0 | 6.5 |
| BZW06-64 | 64.1 | 5 | 75 \pm 5% | 71.3...78.8 | 103 | 5.8 |
| BZW06-70 | 70.1 | 5 | 82 \pm 5% | 77.9...86.1 | 113 | 5.3 |
| BZW06-78 | 77.8 | 5 | 91 \pm 5% | 86.5...95.5 | 125 | 4.8 |
| BZW06-85 | 85.8 | 5 | 100 \pm 5% | 95.0...105 | 137 | 4.4 |
| BZW06-94 | 94.0 | 5 | 110 \pm 5% | 105...116 | 152 | 3.9 |
| BZW06-102 | 102 | 5 | 120 \pm 5% | 114...126 | 165 | 3.6 |
| BZW06-111 | 111 | 5 | 130 \pm 5% | 124...137 | 179 | 3.4 |
| BZW06-128 | 128 | 5 | 150 \pm 5% | 143...158 | 207 | 2.9 |
| BZW06-136 | 136 | 5 | 160 \pm 5% | 152...168 | 219 | 2.7 |
| BZW06-145 | 145 | 5 | 170 \pm 5% | 162...179 | 234 | 2.6 |
| BZW06-154 | 154 | 5 | 180 \pm 5% | 171...189 | 246 | 2.4 |
| BZW06-171 | 171 | 5 | 200 \pm 5% | 190...210 | 274 | 2.2 |
| BZW06-188 | 188 | 5 | 220 \pm 5% | 209...231 | 301 | 2.0 |
| BZW06-213 | 213 | 5 | 250 \pm 5% | 237...263 | 344 | 1.8 |
| BZW06-239 | 239 | 5 | 280 \pm 5% | 266...294 | 384 | 1.7 |
| BZW06-256 | 256 | 5 | 300 \pm 5% | 285...315 | 414 | 1.6 |
| BZW06-273 | 273 | 5 | 320 \pm 5% | 304...336 | 438 | 1.6 |
| BZW06-299 | 299 | 5 | 350 \pm 5% | 332...368 | 482 | 1.6 |
| BZW06-342 | 342 | 5 | 400 \pm 5% | 380...420 | 548 | 1.3 |
| BZW06-376 | 376 | 5 | 440 \pm 5% | 418...462 | 603 | 1.3 |

