

TM

BZX384C2V4 THRU BZX384C39

Small Signal Zener Diode 2.4 to 39 Volts

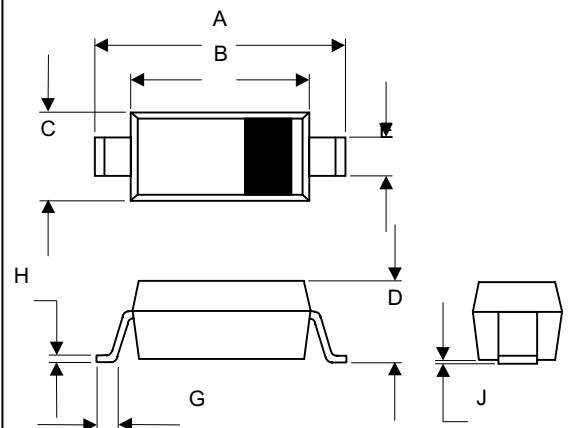
Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Low reverse current level
- For Surface Mount Applications
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

Maximum Ratings

- Junction Temperature: 150°C
- Storage Temperature: -65°C to +150°C
- Power Dissipation: 200mW
- Maximum Forward Voltage @ 100mA: 1.5Volts

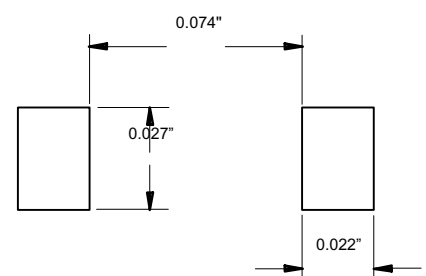
SOD-323



DIMENSIONS

| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|-------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .090 | .107 | 2.30 | 2.70 | |
| B | .063 | .071 | 1.60 | 1.80 | |
| C | .045 | .053 | 1.15 | 1.35 | |
| D | .031 | .045 | 0.80 | 1.15 | |
| E | .010 | .016 | 0.25 | 0.40 | |
| G | .004 | .018 | 0.10 | 0.45 | |
| H | .004 | .010 | 0.10 | 0.25 | |
| J | ----- | .006 | ----- | 0.15 | |

SUGGESTED SOLDER
PAD LAYOUT



| Type | Marking | Zener Voltage Range | | Dynamic Resistance | | | Temperature Coefficient of Zener Voltage | Reverse Leakage current | |
|------|---------|---------------------|-------------------|--------------------|----------|-------------------|------------------------------------------|-------------------------|----------------------|
| | | I_{ZT} mA | for V_{ZT} V | r_{zT} | r_{zK} | at I_{ZK} mA | $v_z @ I_{ZT}$ $10^{-4}/$ | I_R μA | V_R V |
| 2V4 | W1 | 5 | 2.2~2.6 | <100 | 275 | 1 | -9~-4 | 50 | 1 |
| 2V7 | W2 | 5 | 2.5~2.9 | <100 | 600 | 1 | -9~-4 | 20 | 1 |
| 3V0 | W3 | 5 | 2.8~3.2 | <95 | 600 | 1 | -9~-3 | 10 | 1 |
| 3V3 | W4 | 5 | 3.1~3.5 | <95 | 600 | 1 | -8~-3 | 5 | 1 |
| 3V6 | W5 | 5 | 3.4~3.8 | <90 | 600 | 1 | -8~-3 | 5 | 1 |
| 3V9 | W6 | 5 | 3.7~4.1 | <90 | 600 | 1 | -7~-3 | 3 | 1 |
| 4V3 | W7 | 5 | 4.0~4.6 | <90 | 600 | 1 | -6~-1 | 3 | 1 |
| 4V7 | W8 | 5 | 4.4~5.0 | <80 | 500 | 1 | -5~2 | 3 | 2 |
| 5V1 | W9 | 5 | 4.8~5.4 | <60 | 480 | 1 | -3~4 | 2 | 2 |
| 5V6 | WA | 5 | 5.2~6.0 | <40 | 400 | 1 | -2~6 | 1 | 2 |
| 6V2 | WB | 5 | 5.8~6.6 | <10 | 150 | 1 | -1~7 | 3 | 4 |
| 6V8 | WC | 5 | 6.4~7.2 | <15 | 80 | 1 | 2~7 | 2 | 4 |
| 7V5 | WD | 5 | 7.0~7.9 | <15 | 80 | 1 | 3~7 | 1 | 5 |
| 8V2 | WE | 5 | 7.7~8.7 | <15 | 80 | 1 | 4~7 | 0.7 | 5 |
| 9V1 | WF | 5 | 8.5~9.6 | <15 | 100 | 1 | 5~8 | 0.5 | 6 |
| 10 | WG | 5 | 9.4~10.6 | <20 | 150 | 1 | 5~8 | 0.2 | 7 |
| 11 | WH | 5 | 10.4~11.6 | <20 | 150 | 1 | 5~9 | 0.1 | 8 |
| 12 | WI | 5 | 11.4~12.7 | <25 | 150 | 1 | 6~9 | 0.1 | 8 |
| 13 | WK | 5 | 12.4~14.1 | <30 | 170 | 1 | 7~9 | 0.1 | 8 |
| 15 | WL | 5 | 13.8~15.6 | <30 | 200 | 1 | 7~9 | 0.05 | 0.7V _{Znom} |
| 16 | WM | 5 | 15.3~17.1 | <40 | 200 | 1 | 8~9.5 | 0.05 | 0.7V _{Znom} |
| 18 | WN | 5 | 16.8~19.1 | <45 | 225 | 1 | 8~9.5 | 0.05 | 0.7V _{Znom} |
| 20 | WO | 5 | 18.8~21.2 | <55 | 225 | 1 | 8~10 | 0.05 | 0.7V _{Znom} |
| 22 | WP | 5 | 20.8~23.3 | <55 | 250 | 1 | 8~10 | 0.05 | 0.7V _{Znom} |
| 24 | WR | 5 | 22.8~25.6 | <70 | 250 | 1 | 8~10 | 0.05 | 0.7V _{Znom} |
| 27 | WS | 2 | 25.1~28.9 | <80 | 300 | 0.5 | 8~10 | 0.05 | 0.7V _{Znom} |
| 30 | WT | 2 | 28~32 | <80 | 300 | 0.5 | 8~10 | 0.05 | 0.7V _{Znom} |
| 33 | WU | 2 | 31~35 | <80 | 325 | 0.5 | 8~10 | 0.05 | 0.7V _{Znom} |
| 36 | WW | 2 | 34~38 | <90 | 350 | 0.5 | 8~10 | 0.05 | 0.7V _{Znom} |
| 39 | WX | 2 | 37~41 | <130 | 350 | 0.5 | 10~12 | 0.05 | 0.7V _{Znom} |

¹⁾ Measured with pulses $T_p=20mS$

²⁾ Tighter tolerances available request: BZX384B2V4 ~ BZX384B39

³⁾ Valid provided that electrodes are kept at ambient temperature, $T=25$.

Ordering Information

| Device | Packing |
|------------------|----------------------|
| (Part Number)-TP | Tape&Reel;3Kpcs/Reel |