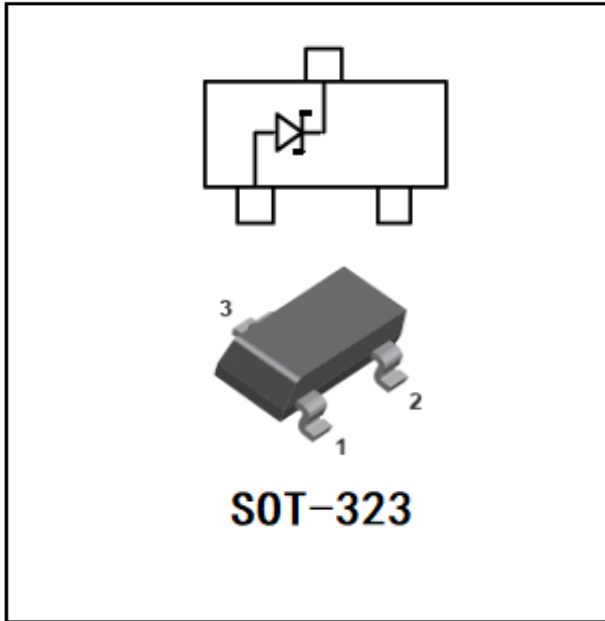


Zener Diode



Features

- 200mW power dissipation rating.
- Epoxy meets UL-94 V-0 flammability rating
- Zener Voltage from 2.4V to 39V.
- Moisture Sensitivity Level 1
- High Conductance
- Surface mount package ideally Suited for Automatic Insertion

Mechanical Data

- **Package:** SOT-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ Limiting Values (Absolute Maximum Rating, Ta=25°C Unless otherwise specified)

| Characteristic | Symbol | Value | Units |
|--|-------------------|----------|-------|
| Maximum Forward Voltage@I _F =10mA | V _F | 0.9 | V |
| Power Dissipation | PD | 200 | mW |
| Peak Forward Surge Current* | I _{FSM} | 2.0 | A |
| Thermal Resistance | R _{thJA} | 625 | °C /W |
| Operation Temperature | T _J | -55~+150 | °C |
| Storage Temperature Range | TSTG | -55~+150 | °C |

*Measured on 8.3ms, single half sine-wave

■ Ordering Information (Example)

| PREFERED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|------------------------------|--------------|-------------------|----------------------|-------------------------|----------------------------|---------------|
| BZX84C2V4W THRU BZX84C39W | F2 | Approximate 0.005 | 3000 | 30000 | 120000 | 7" reel |



BZX84C2V4W THRU BZX84C39W

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

| Type Number | Marking Code | Nominal Zener Voltage | | | Maximum Zener Impedance | | | | Max Reverse Leakage Current | |
|-------------|--------------|-------------------------------------|------|------|----------------------------------|----------------------|----------------------------------|----------------------|-------------------------------------|--------------------|
| | | V _Z (V)@ I _{ZT} | | | Z _{ZT} @I _{ZT} | | Z _{Zk} @I _{Zk} | | I _R (μA)@ V _R | |
| | | Min. | Typ. | Max. | Z _{ZT} (Ω) | I _{ZT} (mA) | Z _{Zk} (Ω) | I _{Zk} (mA) | Max | V _R (V) |
| BZX84C2V4W | KRB | 2.28 | 2.4 | 2.52 | 100 | 5 | 600 | 1 | 50 | 1 |
| BZX84C2V7W | KRC | 2.5 | 2.7 | 2.9 | 100 | 5 | 600 | 1 | 20 | 1 |
| BZX84C3V0W | KRD | 2.8 | 3.0 | 3.2 | 95 | 5 | 600 | 1 | 10 | 1 |
| BZX84C3V3W | KRE | 3.1 | 3.3 | 3.5 | 95 | 5 | 600 | 1 | 5 | 1 |
| BZX84C3V6W | KRF | 3.4 | 3.6 | 3.8 | 90 | 5 | 600 | 1 | 5 | 1 |
| BZX84C3V9W | KRG | 3.7 | 3.9 | 4.1 | 90 | 5 | 600 | 1 | 3 | 1 |
| BZX84C4V3W | KRH | 4.0 | 4.3 | 4.6 | 90 | 5 | 600 | 1 | 3 | 1 |
| BZX84C4V7W | KR1 | 4.4 | 4.7 | 5.0 | 80 | 5 | 500 | 1 | 3 | 2 |
| BZX84C5V1W | KR2 | 4.8 | 5.1 | 5.4 | 60 | 5 | 480 | 1 | 2 | 2 |
| BZX84C5V6W | KR3 | 5.2 | 5.6 | 6.0 | 40 | 5 | 400 | 1 | 1 | 2 |
| BZX84C6V2W | KR4 | 5.8 | 6.2 | 6.6 | 10 | 5 | 150 | 1 | 3 | 4 |
| BZX84C6V8W | KR5 | 6.4 | 6.8 | 7.2 | 15 | 5 | 80 | 1 | 2 | 4 |
| BZX84C7V5W | KR6 | 7.0 | 7.5 | 7.9 | 15 | 5 | 80 | 1 | 1 | 5 |
| BZX84C8V2W | KR7 | 7.7 | 8.2 | 8.7 | 15 | 5 | 80 | 1 | 0.7 | 5 |
| BZX84C9V1W | KR8 | 8.5 | 9.1 | 9.6 | 15 | 5 | 100 | 1 | 0.5 | 6 |
| BZX84C10W | KR9 | 9.4 | 10 | 10.6 | 20 | 5 | 150 | 1 | 0.2 | 7 |
| BZX84C11W | KP1 | 10.4 | 11 | 11.6 | 20 | 5 | 150 | 1 | 0.1 | 8 |
| BZX84C12W | KP2 | 11.4 | 12 | 12.7 | 25 | 5 | 150 | 1 | 0.1 | 8 |
| BZX84C13W | KP3 | 12.4 | 13 | 14.1 | 30 | 5 | 170 | 1 | 0.1 | 8 |
| BZX84C15W | KP4 | 13.8 | 15 | 15.6 | 30 | 5 | 200 | 1 | 0.1 | 10.5 |
| BZX84C16W | KP5 | 15.3 | 16 | 17.1 | 40 | 5 | 200 | 1 | 0.1 | 11.2 |
| BZX84C18W | KP6 | 16.8 | 18 | 19.1 | 45 | 5 | 225 | 1 | 0.1 | 12.6 |
| BZX84C20W | KP7 | 18.8 | 20 | 21.2 | 55 | 5 | 225 | 1 | 0.1 | 14 |
| BZX84C22W | KP8 | 20.8 | 22 | 23.3 | 55 | 5 | 250 | 1 | 0.1 | 15.4 |
| BZX84C24W | KP9 | 22.8 | 24 | 25.6 | 70 | 5 | 250 | 1 | 0.1 | 16.8 |
| BZX84C27W | KPA | 25.1 | 27 | 28.9 | 80 | 2 | 300 | 1 | 0.1 | 18.9 |
| BZX84C30W | KPB | 28 | 30 | 32 | 80 | 2 | 300 | 1 | 0.1 | 21.0 |
| BZX84C33W | KPC | 31 | 33 | 35 | 80 | 2 | 325 | 1 | 0.1 | 23.1 |
| BZX84C36W | KPD | 34 | 36 | 38 | 90 | 2 | 350 | 1 | 0.1 | 25.2 |
| BZX84C39W | KPE | 37 | 39 | 41 | 130 | 2 | 350 | 1 | 0.1 | 27.3 |



BZX84C2V4W THRU BZX84C39W

■ Characteristics(Typical)

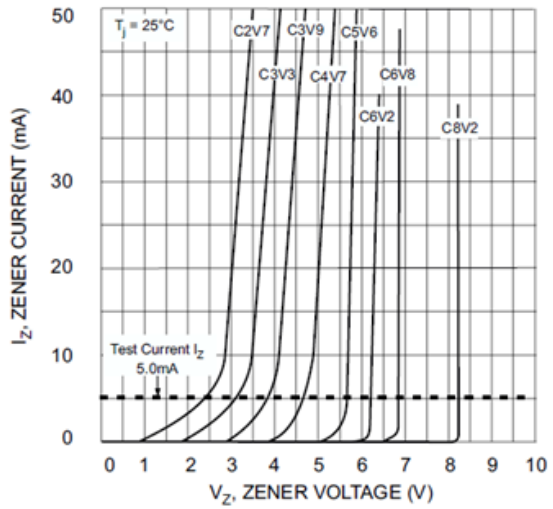
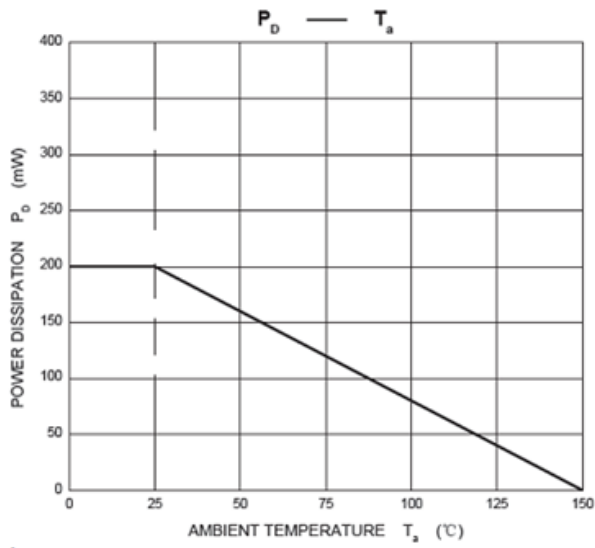


Fig. 3 Zener Breakdown Characteristics

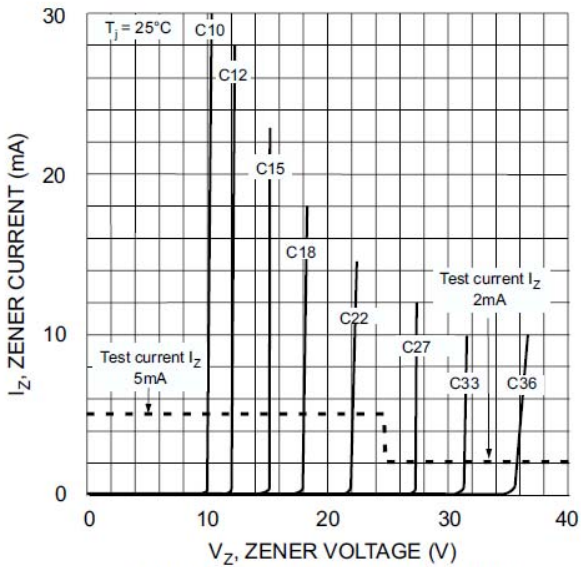


Fig. 4 Zener Breakdown Characteristics

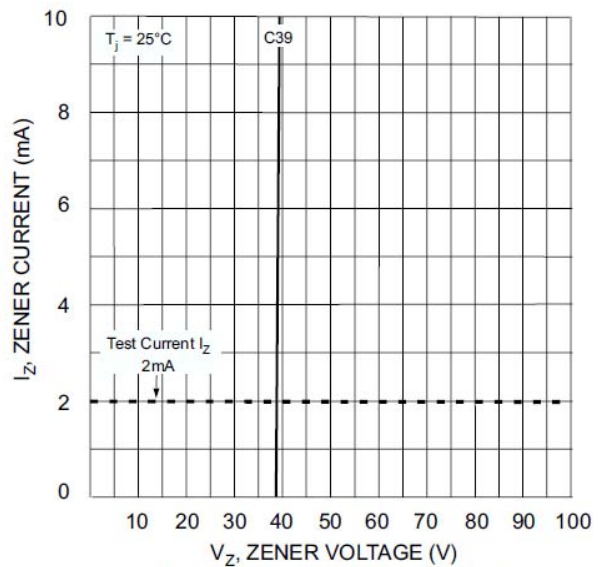


Fig. 5 Zener Breakdown Characteristics

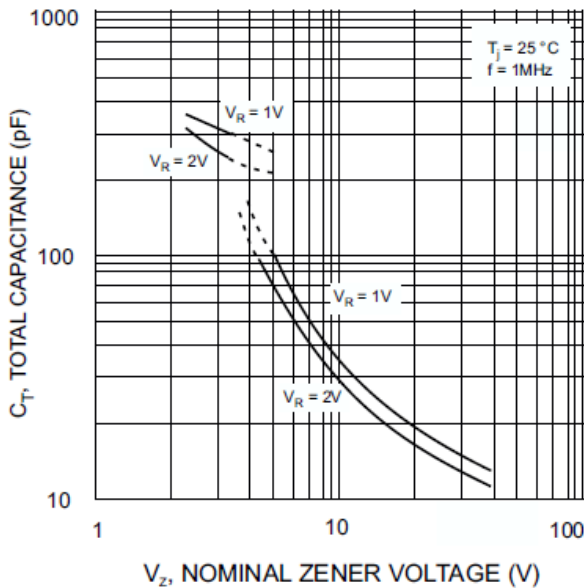
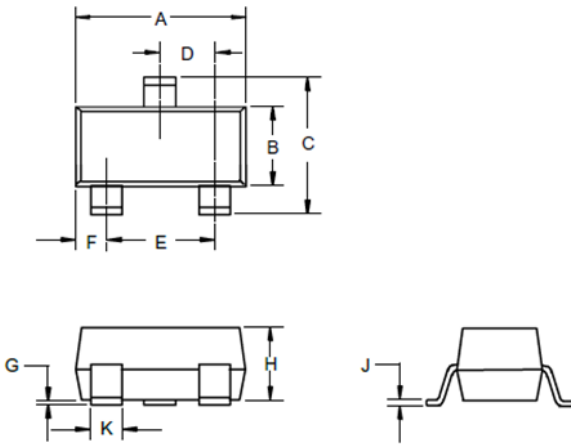


Fig. 1 Total Capacitance vs Nominal Zener Voltage



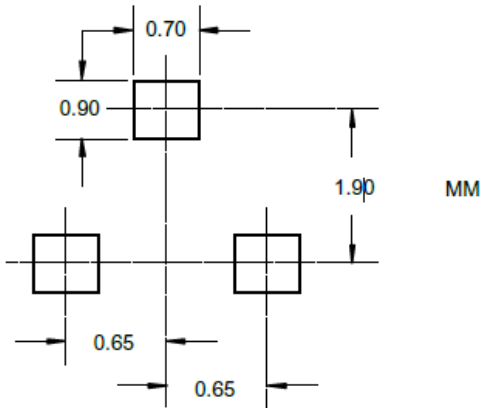
BZX84C2V4W THRU BZX84C39W

■ SOT-323 Package Outline Dimensions



| DIMENSIONS | | | | | NOTE |
|------------|--------------|------|-------------|------|------|
| DIM | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .071 | .087 | 1.80 | 2.20 | |
| B | .045 | .053 | 1.15 | 1.35 | |
| C | .083 | .096 | 2.10 | 2.45 | |
| D | .026 Nominal | | 0.65Nominal | | |
| E | .047 | .055 | 1.20 | 1.40 | |
| F | .012 | .016 | .30 | .40 | |
| G | .000 | .004 | .000 | .100 | |
| H | .035 | .039 | .90 | 1.00 | |
| J | .004 | .010 | .100 | .250 | |
| K | .006 | .016 | .15 | .40 | |

■ SOT-323 Suggested Pad Layout





BZX84C2V4W THRU BZX84C39W

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Zener Diodes](#) category:

Click to view products by [Yangjie](#) manufacturer:

Other Similar products are found below :

[RKZ13B2KG#P1](#) [DL5234B](#) [EDZTE6113B](#) [1N4682](#) [1N4693](#) [1N4732A](#) [1N4736A](#) [1N4750A](#) [1N4759ARL](#) [1N5241B](#) [1N5365B](#) [1N5369B](#)
[1N747A](#) [1N964B](#) [1N966B](#) [1N968B](#) [1N972B](#) [JANS1N4974US](#) [JANTX1N5907](#) [1N4692](#) [1N4700](#) [1N4702](#) [1N4704](#) [1N4711](#) [1N4714](#)
[1N4745ARL](#) [1N4752ARL](#) [1N4760ARL](#) [1N5221B](#) [1N5242BTR](#) [1N5350B](#) [1N5352B](#) [1N961BRR1](#) [1N964BRL](#) [RKZ5.1BKU#P6](#)
[3SMAJ5946B-TP](#) [3SMAJ5950B-TP](#) [3SMBJ5925B-TP](#) [MMSZ5230BQ-13-F](#) [MMSZ5232BQ-13-F](#) [BZX84C7V5](#) [3SMAJ5945B-TP](#)
[3SMAJ5947B-TP](#) [3SMBJ5941B-TP](#) [DL4732A-T3](#) [DZ2S240M0L](#) [SMAZ27-TP](#) [ZMM5224B-7](#) [RD16UM-T1-A](#) [RD39S-T1-A](#)