

BZX84C3V3 THRU BZX84C33

**350mW ZENER DIODE
3.3 VOLTS THRU 33 VOLTS
5% TOLERANCE**

**Central™
Semiconductor Corp.**

DESCRIPTION:

The CENTRAL SEMICONDUCTOR BZX84C3V3 Series Silicon Zener Diode is a high quality voltage regulator for use in industrial, commercial, entertainment and computer applications.



SOT-23 CASE

ABSOLUTE MAXIMUM RATINGS

Power Dissipation (@T_A=25°C)
Operating and Storage Temperature
Thermal Resistance

SYMBOL

P_D
T_J, T_{stg}
θ_{JA}

350
-65 to +150
357

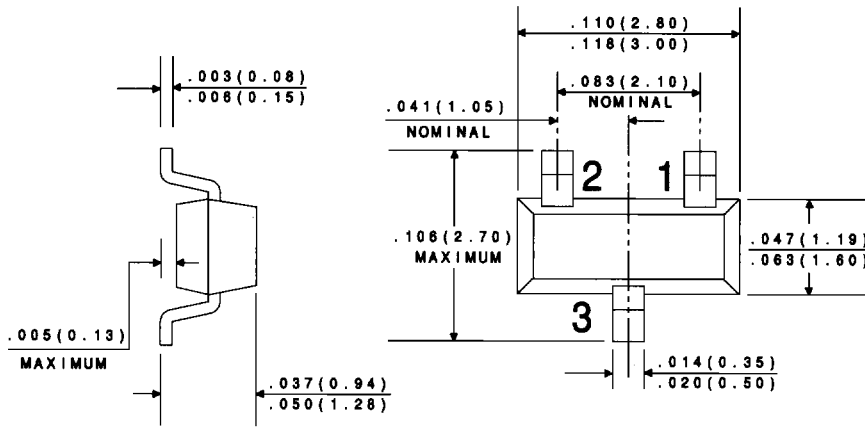
UNIT

mW
°C
°C/W

ELECTRICAL CHARACTERISTICS (T_A=25°C), V_F=0.9V MAX @ I_F=10mA FOR ALL TYPES.

| TYPE | Zener Voltage V _Z @I _{ZT} | | Test Current I _{ZT} | Maximum Zener Impedance | | | Maximum Reverse Current | | Maximum Zener Current I _{ZM} | Maximum Zener Voltage Temperature Coefficient θV _Z | Marking Code |
|-----------|--|-------|---------------------------------|----------------------------------|----------------------------------|--------------------------------|-------------------------|-------|--|--|--------------|
| | MIN | MAX | | Z _{ZT} @I _{ZT} | Z _{ZK} @I _{ZK} | I _R @V _R | | | | | |
| | Volts | Volts | mA | Ω | Ω | mA | μA | Volts | mA | %/°C | |
| BZX84C3V3 | 3.1 | 3.5 | 5.0 | 95 | 600 | 1.0 | 5.0 | 1.0 | 76 | -0.06 | W6 |
| BZX84C3V6 | 3.4 | 3.8 | 5.0 | 90 | 600 | 1.0 | 5.0 | 1.0 | 69 | -0.06 | W7 |
| BZX84C3V9 | 3.7 | 4.1 | 5.0 | 90 | 600 | 1.0 | 3.0 | 1.0 | 64 | -0.06 | W8 |
| BZX84C4V3 | 4.0 | 4.6 | 5.0 | 90 | 600 | 1.0 | 3.0 | 1.0 | 58 | -0.05 | W9 |
| BZX84C4V7 | 4.4 | 5.0 | 5.0 | 80 | 500 | 1.0 | 3.0 | 2.0 | 53 | -0.03 | Z1 |
| BZX84C5V1 | 4.8 | 5.4 | 5.0 | 60 | 480 | 1.0 | 2.0 | 2.0 | 49 | 0.02 | Z2 |
| BZX84C5V6 | 5.2 | 6.0 | 5.0 | 40 | 400 | 1.0 | 1.0 | 2.0 | 45 | 0.03 | Z3 |
| BZX84C6V2 | 5.8 | 6.6 | 5.0 | 10 | 150 | 1.0 | 3.0 | 4.0 | 40 | 0.04 | Z4 |
| BZX84C6V8 | 6.4 | 7.2 | 5.0 | 15 | 80 | 1.0 | 2.0 | 4.0 | 37 | 0.05 | Z5 |
| BZX84C7V5 | 7.0 | 7.9 | 5.0 | 15 | 80 | 1.0 | 1.0 | 5.0 | 33 | 0.05 | Z6 |
| BZX84C8V2 | 7.7 | 8.9 | 5.0 | 15 | 80 | 1.0 | 0.7 | 5.0 | 30 | 0.06 | Z7 |
| BZX84C9V1 | 8.5 | 9.6 | 5.0 | 15 | 100 | 1.0 | 0.5 | 6.0 | 27 | 0.06 | Z8 |
| BZX84C10 | 9.4 | 10.6 | 5.0 | 20 | 150 | 1.0 | 0.2 | 7.0 | 25 | 0.07 | Z9 |
| BZX84C11 | 10.4 | 11.6 | 5.0 | 20 | 150 | 1.0 | 0.1 | 8.0 | 23 | 0.07 | Y1 |
| BZX84C12 | 11.4 | 12.7 | 5.0 | 25 | 150 | 1.0 | 0.1 | 8.0 | 21 | 0.07 | Y2 |
| BZX84C13 | 12.4 | 14.1 | 5.0 | 30 | 170 | 1.0 | 0.1 | 8.0 | 19 | 0.08 | Y3 |
| BZX84C15 | 13.8 | 15.6 | 5.0 | 30 | 200 | 1.0 | 0.05 | 10.5 | 17 | 0.08 | Y4 |
| BZX84C16 | 15.3 | 17.1 | 5.0 | 40 | 200 | 1.0 | 0.05 | 11.2 | 16 | 0.08 | Y5 |
| BZX84C18 | 16.8 | 19.1 | 5.0 | 45 | 225 | 1.0 | 0.05 | 12.6 | 14 | 0.08 | Y6 |
| BZX84C20 | 18.8 | 21.2 | 5.0 | 55 | 225 | 1.0 | 0.05 | 14.0 | 12 | 0.08 | Y7 |
| BZX84C22 | 20.8 | 23.3 | 5.0 | 55 | 250 | 1.0 | 0.05 | 15.4 | 11 | 0.09 | Y8 |
| BZX84C24 | 22.8 | 25.6 | 5.0 | 70 | 250 | 1.0 | 0.05 | 16.8 | 10 | 0.09 | Y9 |
| BZX84C27 | 25.1 | 28.9 | 2.0 | 80 | 300 | 0.5 | 0.05 | 18.9 | 9 | 0.09 | Y10 |
| BZX84C30 | 28.0 | 32.0 | 2.0 | 80 | 300 | 0.5 | 0.05 | 21.0 | 8 | 0.09 | Y11 |
| BZX84C33 | 31.0 | 35.0 | 2.0 | 80 | 325 | 0.5 | 0.05 | 23.1 | 7 | 0.09 | Y12 |

All dimensions in inches (mm).



LEAD CODE:

- 1) ANODE
- 2) NO CONNECTION
- 3) CATHODE

DATA SHEET