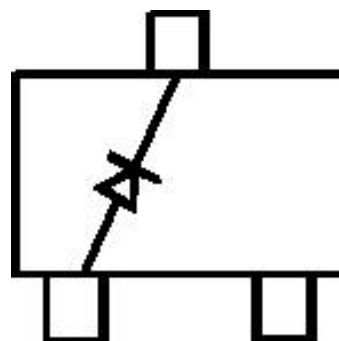




BZX84C3V0-C47



SOT-23 内部结构

**SOT-23 SURFACE MOUNT ZENER DIODE 表面貼裝穩壓二極管**

**■ FEATURES 特點**

| Characteristic<br>特性參數                          | Symbol<br>符號                          | Max<br>最大值                                            | Unit<br>單位 |
|-------------------------------------------------|---------------------------------------|-------------------------------------------------------|------------|
| Power dissipation<br>耗散功率                       | $P_D$<br>( $T_a=25^{\circ}\text{C}$ ) | 300                                                   | mW         |
| Forward Current<br>正向電流                         | $I_F$                                 | 250                                                   | mA         |
| Forward Voltage<br>正向電壓                         | $V_F$<br>(@ $I_F=10\text{mA}$ )       | 0.9                                                   | V          |
| Reverse Voltage<br>反向電壓                         | $V_Z$                                 | 3-47                                                  | V          |
| Junctoin and Storage Temperature<br>結溫 and 儲藏溫度 | $T_J, T_{\text{stg}}$                 | 125 $^{\circ}\text{C}$ , -55to+125 $^{\circ}\text{C}$ |            |



# 安徽富信半導體科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD

## ■ ELECTRICAL CHARACTERISTICS 電特性

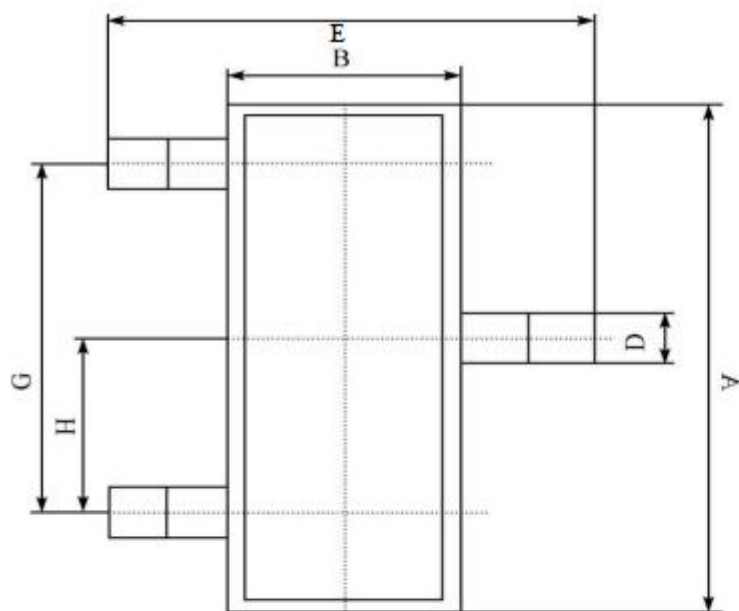
(T<sub>A</sub>=25°C unless otherwise noted 如無特殊說明, 溫度為 25°C)

| CHARACTERISTICS | WORK VOLTAGE V <sub>Z</sub> (V) |      | DIFFERENTIAL RESISTANCE r <sub>diff</sub> (Ω) |      |                     |      | TEMP. COEFF. S <sub>Z</sub> (mV/K) |      |      | Marking |
|-----------------|---------------------------------|------|-----------------------------------------------|------|---------------------|------|------------------------------------|------|------|---------|
| TEST CONDITION  | I <sub>Z</sub> =5mA             |      | I <sub>Z</sub> =1mA                           |      | I <sub>Z</sub> =5mA |      | I <sub>Z</sub> =5mA                |      |      |         |
|                 | MIN.                            | MAX. | TYP.                                          | MAX. | TYP.                | MAX. | MIN.                               | TYP. | MAX. |         |
| BZX84C3V0       | 2.8                             | 3.2  | 325                                           | 600  | 80                  | 95   | -3.5                               | -2.1 | 0    | Z13     |
| BZX84C3V3       | 3.1                             | 3.5  | 350                                           | 600  | 85                  | 95   | -3.5                               | -2.4 | 0    | Z14     |
| BZX84C3V6       | 3.4                             | 3.8  | 375                                           | 600  | 85                  | 90   | -3.5                               | -2.4 | 0    | Z15     |
| BZX84C3V9       | 3.7                             | 4.1  | 400                                           | 600  | 85                  | 90   | -3.5                               | -2.5 | 0    | Z16     |
| BZX84C4V3       | 4.0                             | 4.6  | 400                                           | 600  | 85                  | 90   | -3.5                               | -2.5 | 0    | Z17     |
| BZX84C4V7       | 4.4                             | 5.0  | 410                                           | 600  | 80                  | 90   | -3.5                               | -2.5 | 0    | Z1      |
| BZX84C5V1       | 4.8                             | 5.4  | 425                                           | 500  | 50                  | 80   | -3.5                               | -1.4 | 0.2  | Z2      |
| BZX84C5V6       | 5.2                             | 6.0  | 400                                           | 480  | 40                  | 60   | -2.7                               | -0.8 | 1.2  | Z3      |
| BZX84C6V2       | 5.8                             | 6.6  | 80                                            | 400  | 15                  | 40   | -2.0                               | 1.2  | 2.5  | Z4      |
| BZX84C6V8       | 6.4                             | 7.2  | 40                                            | 150  | 6                   | 10   | 0.4                                | 2.3  | 3.7  | Z5      |
| BZX84C7V5       | 7.0                             | 7.9  | 30                                            | 80   | 6                   | 15   | 1.2                                | 3.0  | 4.5  | Z6      |
| BZX84C8V2       | 7.7                             | 8.7  | 30                                            | 80   | 6                   | 15   | 2.5                                | 4.0  | 5.3  | Z7      |
| BZX84C9V1       | 8.5                             | 9.6  | 40                                            | 80   | 6                   | 15   | 3.2                                | 4.6  | 6.2  | Z8      |
| BZX84C10        | 9.4                             | 10.6 | 40                                            | 100  | 6                   | 15   | 3.8                                | 5.5  | 7.0  | Z9      |
| BZX84C11        | 10.4                            | 11.6 | 50                                            | 150  | 8                   | 20   | 4.5                                | 6.4  | 8.0  | Y1      |
| BZX84C12        | 11.4                            | 12.7 | 50                                            | 150  | 10                  | 20   | 5.4                                | 7.4  | 9.0  | Y2      |
| BZX84C13        | 12.4                            | 14.1 | 50                                            | 150  | 10                  | 25   | 6.0                                | 8.4  | 10.0 | Y3      |
| BZX84C15        | 13.8                            | 15.6 | 50                                            | 170  | 10                  | 30   | 7.0                                | 9.4  | 11.0 | Y4      |
| BZX84C16        | 15.3                            | 17.1 | 50                                            | 200  | 10                  | 30   | 9.2                                | 11.4 | 13.0 | Y5      |
| BZX84C18        | 16.8                            | 19.1 | 50                                            | 200  | 10                  | 40   | 10.4                               | 12.4 | 14.0 | Y6      |
| BZX84C20        | 18.8                            | 21.2 | 50                                            | 225  | 10                  | 45   | 12.4                               | 14.4 | 16.0 | Y7      |
| BZX84C22        | 20.8                            | 23.3 | 60                                            | 225  | 15                  | 55   | 14.4                               | 16.4 | 18.0 | Y8      |
| BZX84C24        | 22.8                            | 25.6 | 60                                            | 250  | 20                  | 55   | 16.4                               | 18.4 | 20.0 | Y9      |
| TEST CONDITION  | I <sub>Z</sub> =2mA             |      | I <sub>Z</sub> =0.5mA                         |      | I <sub>Z</sub> =2mA |      | I <sub>Z</sub> =2mA                |      |      |         |
| BZX84C27        | 25.1                            | 28.9 | 65                                            | 300  | 25                  | 80   | 21.4                               | 23.4 | 25.3 | Y10     |
| BZX84C30        | 28.0                            | 32.0 | 70                                            | 300  | 30                  | 80   | 24.4                               | 26.6 | 29.4 | Y11     |
| BZX84C33        | 31.0                            | 35.0 | 75                                            | 325  | 35                  | 80   | 27.4                               | 29.7 | 33.4 | Y12     |
| BZX84C36        | 34.0                            | 38.0 | 80                                            | 350  | 35                  | 90   | 30.4                               | 33.0 | 37.4 | Y13     |
| BZX84C39        | 37.0                            | 41.0 | 80                                            | 350  | 40                  | 130  | 33.4                               | 36.4 | 41.2 | Y14     |
| BZX84C43        | 40.0                            | 46.0 | 85                                            | 375  | 45                  | 150  | 37.6                               | 41.2 | 46.6 | Y15     |
| BZX84C47        | 44.0                            | 50.0 | 85                                            | 375  | 50                  | 170  | 42.0                               | 46.1 | 51.8 | Y16     |

BZX84C3V0-C47

## ■ DIMENSION 外形封裝尺寸

■ 单位 (UNIT) : mm



| 代碼 | 範圍 (單位:mm) |
|----|------------|
| A  | 2.80~3.00  |
| B  | 1.20~1.40  |
| C  | 0.90~1.10  |
| D  | 0.30~0.50  |
| E  | 2.20~2.60  |
| G  | 1.80~2.00  |
| H  | 0.90~1.00  |
| J  | 0.08~0.18  |
| K  | 0.02~0.12  |
| M  | ≥0.22      |
| N  | 0.50~0.70  |
| P  | 6°~10°     |

