

# BZX584C-02V Series

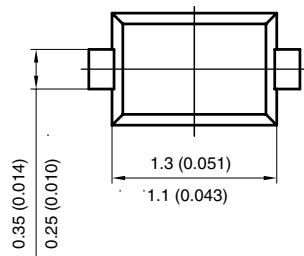
Vishay Semiconductors



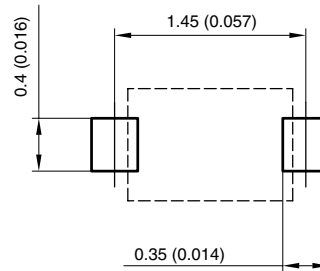
## Electrical Characteristics

| Part number    | Marking code | Zener voltage range |      | Dynamic resistance    |                       | Test current | Temp. coefficient of zener voltage |       | Test current | Reverse leakage current |                |
|----------------|--------------|---------------------|------|-----------------------|-----------------------|--------------|------------------------------------|-------|--------------|-------------------------|----------------|
|                |              | $V_Z$ at 5 mA       |      | $r_{zj}$ at $I_{ZT1}$ | $r_{zj}$ at $I_{ZT2}$ | $I_{ZT1}$    | $\alpha_{VZ}$ at 5 mA              |       | $I_{ZT2}$    | $I_R$                   | at $V_R$       |
|                |              | V                   |      | $\Omega$              |                       | mA           | $10^{-4}/^{\circ}\text{C}$         |       | mA           | $\mu\text{A}$           | V              |
|                |              | min                 | max  |                       |                       |              | min                                | max   |              |                         |                |
| BZX584C2V4-02V | 2            | 2.2                 | 2.6  | 70 ( $\leq 100$ )     | 275 ( $\leq 600$ )    | 5            | - 9                                | - 4   | 1            | 50                      | 1              |
| BZX584C2V7-02V | 3            | 2.5                 | 2.9  | 75 ( $\leq 100$ )     | 300 ( $\leq 600$ )    | 5            | - 9                                | - 4   | 1            | 20                      | 1              |
| BZX584C3V0-02V | 4            | 2.8                 | 3.2  | 80 ( $\leq 95$ )      | 325 ( $\leq 600$ )    | 5            | - 9                                | - 3   | 1            | 10                      | 1              |
| BZX584C3V3-02V | 5            | 3.1                 | 3.5  | 85 ( $\leq 95$ )      | 350 ( $\leq 600$ )    | 5            | - 8                                | - 3   | 1            | 5                       | 1              |
| BZX584C3V6-02V | 6            | 3.4                 | 3.8  | 85 ( $\leq 90$ )      | 375 ( $\leq 600$ )    | 5            | - 8                                | - 3   | 1            | 5                       | 1              |
| BZX584C3V9-02V | 7            | 3.7                 | 4.1  | 85 ( $\leq 90$ )      | 400 ( $\leq 600$ )    | 5            | - 7                                | - 3   | 1            | 3                       | 1              |
| BZX584C4V3-02V | 8            | 4                   | 4.6  | 80 ( $\leq 90$ )      | 410 ( $\leq 600$ )    | 5            | - 6                                | - 1   | 1            | 3                       | 1              |
| BZX584C4V7-02V | 9            | 4.4                 | 5    | 50 ( $\leq 80$ )      | 425 ( $\leq 500$ )    | 5            | - 5                                | + 2   | 1            | 3                       | 2              |
| BZX584C5V1-02V | 1            | 4.8                 | 5.4  | 40 ( $\leq 60$ )      | 400 ( $\leq 480$ )    | 5            | - 3                                | + 4   | 1            | 2                       | 2              |
| BZX584C5V6-02V | 0            | 5.2                 | 6    | 15 ( $\leq 40$ )      | 80 ( $\leq 400$ )     | 5            | - 2                                | + 6   | 1            | 1                       | 2              |
| BZX584C6V2-02V | 1            | 5.8                 | 6.6  | 6 ( $\leq 10$ )       | 40 ( $\leq 150$ )     | 5            | - 1                                | + 7   | 1            | 3                       | 4              |
| BZX584C6V8-02V | 2            | 6.4                 | 7.2  | 6 ( $\leq 15$ )       | 30 ( $\leq 80$ )      | 5            | + 2                                | + 7   | 1            | 2                       | 4              |
| BZX584C7V5-02V | 3            | 7                   | 7.9  | 6 ( $\leq 15$ )       | 30 ( $\leq 80$ )      | 5            | + 3                                | + 7   | 1            | 1                       | 5              |
| BZX584C8V2-02V | 4            | 7.7                 | 8.7  | 6 ( $\leq 15$ )       | 40 ( $\leq 80$ )      | 5            | + 4                                | + 7   | 1            | 0.7                     | 5              |
| BZX584C9V1-02V | 5            | 8.5                 | 9.6  | 6 ( $\leq 15$ )       | 40 ( $\leq 100$ )     | 5            | + 5                                | + 8   | 1            | 0.5                     | 6              |
| BZX584C10-02V  | 6            | 9.4                 | 10.6 | 8 ( $\leq 20$ )       | 50 ( $\leq 150$ )     | 5            | + 5                                | + 8   | 1            | 0.2                     | 7              |
| BZX584C11-02V  | 7            | 10.4                | 11.6 | 10 ( $\leq 20$ )      | 50 ( $\leq 150$ )     | 5            | + 5                                | + 9   | 1            | 0.1                     | 8              |
| BZX584C12-02V  | 8            | 11.4                | 12.7 | 10 ( $\leq 25$ )      | 50 ( $\leq 150$ )     | 5            | + 6                                | + 9   | 1            | 0.1                     | 8              |
| BZX584C13-02V  | 9            | 12.4                | 14.1 | 10 ( $\leq 30$ )      | 50 ( $\leq 170$ )     | 5            | + 7                                | + 9   | 1            | 0.1                     | 8              |
| BZX584C15-02V  | 0            | 13.8                | 15.6 | 10 ( $\leq 30$ )      | 50 ( $\leq 200$ )     | 5            | + 7                                | + 9   | 1            | 0.1                     | 8              |
| BZX584C16-02V  | 1            | 15.3                | 17.1 | 10 ( $\leq 40$ )      | 50 ( $\leq 200$ )     | 5            | + 8                                | + 9.5 | 1            | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C18-02V  | 2            | 16.8                | 19.1 | 10 ( $\leq 45$ )      | 50 ( $\leq 225$ )     | 5            | + 8                                | + 9.5 | 1            | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C20-02V  | 3            | 18.8                | 21.2 | 15 ( $\leq 55$ )      | 60 ( $\leq 225$ )     | 5            | + 8                                | + 10  | 1            | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C22-02V  | 4            | 20.8                | 23.3 | 20 ( $\leq 55$ )      | 60 ( $\leq 250$ )     | 5            | + 8                                | + 10  | 1            | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C24-02V  | 5            | 22.8                | 25.6 | 25 ( $\leq 70$ )      | 60 ( $\leq 250$ )     | 5            | + 8                                | + 10  | 1            | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C27-02V  | 6            | 25.1                | 28.9 | 25 ( $\leq 80$ )      | 65 ( $\leq 300$ )     | 2            | + 8                                | + 10  | 0.5          | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C30-02V  | 7            | 28                  | 32   | 30 ( $\leq 80$ )      | 70 ( $\leq 300$ )     | 2            | + 8                                | + 10  | 0.5          | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C33-02V  | 8            | 31                  | 35   | 35 ( $\leq 80$ )      | 75 ( $\leq 325$ )     | 2            | + 8                                | + 10  | 0.5          | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C36-02V  | 9            | 34                  | 38   | 35 ( $\leq 90$ )      | 80 ( $\leq 350$ )     | 2            | + 8                                | + 10  | 0.5          | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C39-02V  | 0            | 37                  | 41   | 40 ( $\leq 130$ )     | 80 ( $\leq 350$ )     | 2            | + 10                               | + 12  | 0.5          | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C43-02V  | 1            | 40                  | 46   | 45 ( $\leq 150$ )     | 85 ( $\leq 375$ )     | 2            | + 10                               | + 12  | 0.5          | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C47-02V  | 2            | 44                  | 50   | 50 ( $\leq 170$ )     | 85 ( $\leq 375$ )     | 2            | + 10                               | + 12  | 0.5          | 0.05                    | $0.7 V_{Znom}$ |
| BZX584C51-02V  | 3            | 48                  | 54   | 60 ( $\leq 180$ )     | 85 ( $\leq 400$ )     | 2            | + 10                               | + 12  | 0.5          | 0.05                    | $0.7 V_{Znom}$ |

## Package Dimensions in millimeters (inches): SOD-523



Foot print recommendation:



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