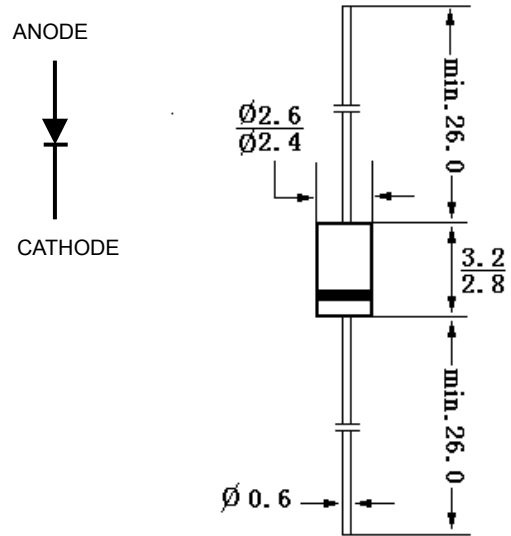


# EZB100 ~EZB390

## SILICON DIFFUSED ZENER DIODES

Constant Voltage Regulation

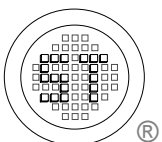
Transient Suppressors



Dimensions in mm

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

|                           | Symbol           | Value       | Unit             |
|---------------------------|------------------|-------------|------------------|
| Power Dissipation         | $P_{\text{tot}}$ | 1           | W                |
| Junction Temperature      | $T_j$            | -40 to +150 | $^\circ\text{C}$ |
| Storage Temperature Range | $T_s$            | -40 to +150 | $^\circ\text{C}$ |



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
Certificate No. 7116



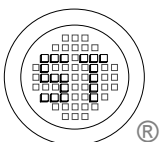
ISO 9001 : 2000  
Certificate No. 050-100-0102-04

Dated : 23/06/2003

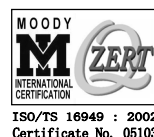
# EZB100 ~EZB390

## Characteristics at $T_a = 25^\circ\text{C}$

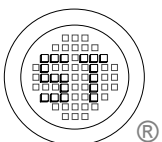
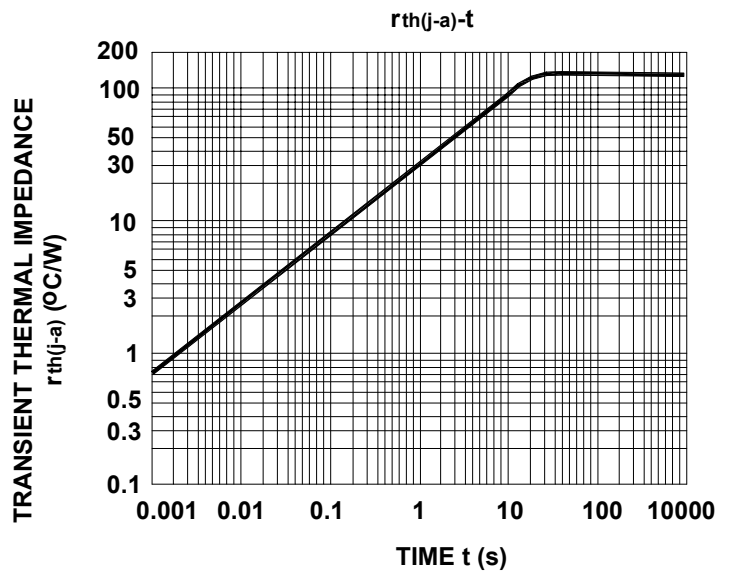
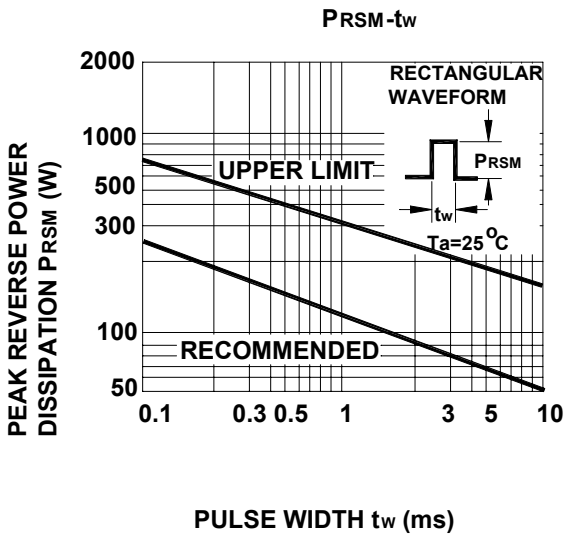
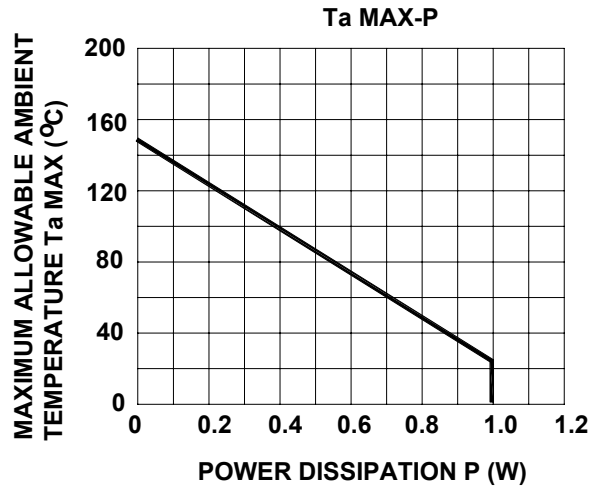
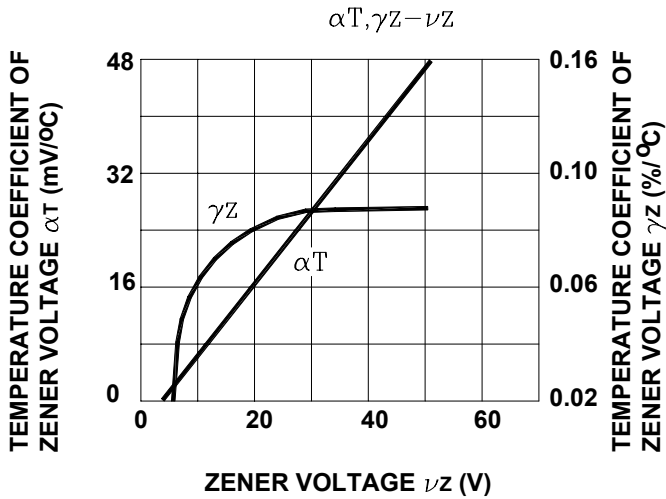
| TYPE     | Zener Characteristics         |      |      |                              |                                      | Temperature Coefficient Of Zener Voltage $\alpha T(\text{mV}/^\circ\text{C})$ |      | Forward Voltage |                                     | Reverse Current    |                                     |
|----------|-------------------------------|------|------|------------------------------|--------------------------------------|---|------|-----------------|-------------------------------------|--------------------|-------------------------------------|
|          | Zener Voltage $V_Z(\text{V})$ |      |      | Zener Impedance $r_d(\zeta)$ | Measurement Current $I_Z(\text{mA})$ | Typ.  | Max. | $V_F(\text{V})$ | Measurement Current $I_F(\text{A})$ | $I_R(\mu\text{A})$ | Measurement Voltage $V_R(\text{V})$ |
|          | Min.                          | Typ. | Max. | Max.                         |                                      |   |      |                 |                                     |                    |                                     |
| EZB100   | 90                            | 100  | 110  | 300                          | 3                                    | 87  | 138  | 1.2             | 0.2                                 | 10                 | 80                                  |
| EZB110   | 99                            | 110  | 121  | 300                          | 3                                    | 96  | 152  | 1.2             | 0.2                                 | 10                 | 88                                  |
| EZB150   | 135                           | 150  | 165  | 450                          | 2                                    | 136   | 212  | 1.2             | 0.2                                 | 10                 | 120                                 |
| EZB180   | 162                           | 180  | 198  | 500                          | 1.5                                  | 161   | 255  | 1.2             | 0.2                                 | 10                 | 144                                 |
| EZB200   | 180                           | 200  | 220  | 500                          | 0.5                                  | 170   | 269  | 1.2             | 0.2                                 | 10                 | 160                                 |
| EZB200-Y | 190                           | 200  | 210  |                              |                                      | 170   | 269  |                 |                                     |                    | 160                                 |
| EZB200-Z | 200                           | 210  | 220  |                              |                                      | 178   | 286  |                 |                                     |                    | 168                                 |
| EZB220   | 198                           | 220  | 242  | 5000                         | 0.5                                  | 200   | 309  | 1.2             | 0.2                                 | 10                 | 176                                 |
| EZB220-Y | 210                           | 220  | 230  |                              |                                      | 200   | 309  |                 |                                     |                    | 176                                 |
| EZB220-Z | 220                           | 230  | 240  |                              |                                      | 207   | 320  |                 |                                     |                    | 184                                 |
| EZB240   | 216                           | 240  | 264  | 5000                         | 0.5                                  | 215   | 325  | 1.2             | 0.2                                 | 10                 | 192                                 |
| EZB240-Y | 230                           | 240  | 250  |                              |                                      | 215   | 325  |                 |                                     |                    | 216                                 |
| EZB240-Z | 240                           | 250  | 260  |                              |                                      | 225   | 338  |                 |                                     |                    | 225                                 |
| EZB270   | 243                           | 270  | 297  | 5000                         | 0.5                                  | 243   | 385  | 1.2             | 0.2                                 | 10                 | 216                                 |
| EZB270-X | 250                           | 260  | 270  |                              |                                      | 221   | 350  |                 |                                     |                    | 234                                 |
| EZB270-Y | 260                           | 270  | 280  |                              |                                      | 228   | 362  |                 |                                     |                    | 243                                 |
| EZB270-Z | 270                           | 280  | 290  |                              |                                      | 236   | 374  |                 |                                     |                    | 252                                 |
| EZB300   | 270                           | 300  | 330  | 5000                         | 0.5                                  | 270   | 428  | 1.2             | 0.2                                 | 10                 | 240                                 |
| EZB300-X | 280                           | 290  | 300  |                              |                                      | 244   | 388  |                 |                                     |                    | 261                                 |
| EZB300-Y | 290                           | 300  | 310  |                              |                                      | 253   | 402  |                 |                                     |                    | 270                                 |
| EZB300-Z | 300                           | 310  | 320  |                              |                                      | 261   | 415  |                 |                                     |                    | 279                                 |
| EZB330   | 297                           | 330  | 363  | 5000                         | 0.5                                  | 296   | 470  | 1.2             | 0.2                                 | 10                 | 264                                 |
| EZB330-X | 310                           | 320  | 330  |                              |                                      | 270   | 428  |                 |                                     |                    | 288                                 |
| EZB330-Y | 320                           | 330  | 340  |                              |                                      | 278   | 441  |                 |                                     |                    | 297                                 |
| EZB330-Z | 330                           | 340  | 350  |                              |                                      | 287   | 455  |                 |                                     |                    | 306                                 |
| EZB390   | 351                           | 390  | 429  | 10000                        | 0.5                                  | 350   | 555  | 1.2             | 0.2                                 | 10                 | 312                                 |



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# EZB100 ~EZB390



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