

Silicon Diodes

General Purpose and Switching Diodes (MiniMELF Glass Package)

| Type | Peak Inv. Voltage PIV | Max. Aver. Rectified Current I_o | Power Dissipation at 25 °C | Junction Temperature T_j | Forward Voltage Drop V_F | Reverse Current I_R | | Reverse Recovery Time | | | |
|---------------|-----------------------|------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|-----|-----------------------|----------|--|------------|
| | | | | | | at I_F | | at V_R | | t_{rr} ns | Conditions |
| | | | | | | Volts | mA | max. mW | max. °C | | |
| BAV100 | 60 | 200 | 500 | 175 | 1.0 | 100 | 100 | 50 | max. 50 | $I_F = I_R = 30$ mA, $R_L = 100$ Ω to $I_R = 3$ mA | |
| BAV101 | 120 | 200 | 500 | 175 | 1.0 | 100 | 100 | 100 | max. 50 | $I_F = I_R = 30$ mA, $R_L = 100$ Ω to $I_R = 3$ mA | |
| BAV102 | 200 | 200 | 500 | 175 | 1.0 | 100 | 100 | 150 | max. 50 | $I_F = I_R = 30$ mA, $R_L = 100$ Ω to $I_R = 3$ mA | |
| BAV103 | 250 | 200 | 500 | 175 | 1.0 | 100 | 100 | 200 | max. 50 | $I_F = I_R = 30$ mA, $R_L = 100$ Ω to $I_R = 3$ mA | |
| LL4148 | 100 | 150 | 500 | 175 | 1.0 | 10 | 25 | 20 | max. 4.0 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| LL4149 | 100 | 150 | 500 | 175 | 1.0 | 10 | 25 | 20 | max. 4.0 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| LL4150 | 50 | 200 | 500 | 175 | 1.0 | 200 | 100 | 50 | max. 4.0 | $I_F = I_R = 10$ to 200 mA, to 0.1 I_F | |
| LL4151 | 75 | 150 | 500 | 175 | 1.0 | 50 | 50 | 50 | max. 2.0 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| LL4448 | 100 | 150 | 500 | 175 | 1.0 | 100 | 25 | 20 | max. 4.0 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| LL4454 | 75 | 150 | 500 | 175 | 1.0 | 10 | 100 | 50 | max. 4.0 | $I_F = I_R = 10$ mA, to $I_R = 1$ mA | |

Fast Switching Diodes (SOT23 Plastic Package)

| Type | Peak Inv. Voltage PIV | Max. Aver. Rectified Current I_o | Power Dissipation at 25 °C | Junction Temperature T_j | Forward Voltage Drop V_F | Reverse Current I_R | | Reverse Recovery Time | | | |
|-----------------|-----------------------|------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|-------------|-----------------------|----------|--|------------|
| | | | | | | at I_F | | at V_R | | t_{rr} ns | Conditions |
| | | | | | | Volts | mA | max. mW | max. °C | | |
| BAL99 | 70 | 150 | 350 | 150 | 1.0 | 50 | 2.5 μ A | 70 | max. 6.0 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| BAS16 | 75 | 150 | 350 | 150 | 1.0 | 50 | 1 μ A | 75 | max. 6.0 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| BAS19 | 120 | 200 | 250 | 150 | 1.0 | 100 | 100 | 100 | max. 50 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| BAS20 | 200 | 200 | 250 | 150 | 1.0 | 100 | 100 | 150 | max. 50 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| BAS21 | 250 | 200 | 250 | 150 | 1.0 | 100 | 100 | 200 | max. 50 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| IMBD4148 | 75 | 150 | 350 | 150 | 1.0 | 10 | 2.5 μ A | 70 | max. 4.0 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| IMBD4444 | 75 | 150 | 350 | 150 | 1.0 | 100 | 2.5 μ A | 70 | max. 4.0 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |

The pin configuration is the following:

BAL99, 1 = Anode, 3 = Katode; BAS16, 1 = Katode, 2 = Anode; BAS19, BAS20, BAS21, 1 = Katode, 2 = Anode; IMBD4148, IMBD4444, 1 = Katode, 2 = Anode

Fast Switching Dual Diodes (SOT23 Plastic Package) The same values apply for both diodes.

| Type | Peak Inv. Voltage PIV | Max. Aver. Rectified Current I_o | Power Dissipation at 25 °C | Junction Temperature T_j | Forward Voltage Drop V_F | Reverse Current I_R | | Reverse Recovery Time | | | |
|--------------|-----------------------|------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|-------------|-----------------------|----------|--|------------|
| | | | | | | at I_F | | at V_R | | t_{rr} ns | Conditions |
| | | | | | | Volts | mA | max. mW | max. °C | | |
| BAV70 | 70 | 250 | 350 | 150 | 1.0 | 50 | 2.5 μ A | 70 | max. 6.0 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| BAV99 | 70 | 250 | 350 | 150 | 1.0 | 50 | 2.5 μ A | 70 | max. 6.0 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |
| BAW56 | 70 | 250 | 350 | 150 | 1.0 | 50 | 2.5 μ A | 70 | max. 6.0 | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 100$ Ω , to $I_R = 1$ mA | |

The pin configuration is the following:

BAV70, 1 = Katode, Katode, 2 = Anode, 3 = Anode; BAV99, 1 = Anode, Katode, 2 = Anode, 3 = Katode; BAW56, 1 = Anode, Anode, 2 = Katode, 3 = Katode