

Axial lead diode

Standard silicon rectifier diodes

BY 1600...BY 2000

Forward Current: 3 A

Reverse Voltage: 1600 to 2000 V

Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0

Mechanical Data

- Plastic case DO-201
- Weight approx.: 1 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 1700 pieces per ammo

1) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case

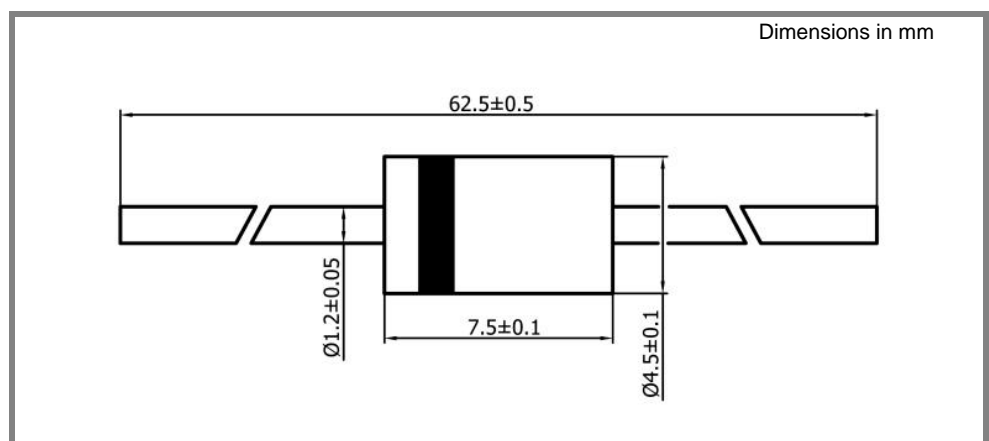
2) $I_F = 3A$, $T_j = 25^\circ C$

3) $T_A = 25^\circ C$

| Type | Repetitive peak reverse voltage | Surge peak reverse voltage | Max. reverse recovery time | Max. forward voltage |
|---------|---------------------------------|----------------------------|---|----------------------|
| | V_{RRM} V | V_{RSM} V | $I_F = -A$ $I_R = -A$ $I_{RR} = -A$ t_{rr} ns | $V_F^{2)}$ |
| BY 1600 | 1600 | 1600 | - | 1,1 |
| BY 1800 | 1800 | 1800 | - | 1,1 |
| BY 2000 | 2000 | 2000 | - | 1,1 |

| Absolute Maximum Ratings | | $T_C = 25^\circ C$, unless otherwise specified | |
|--------------------------|--|---|------------------|
| Symbol | Conditions | Values | Units |
| I_{FAV} | Max. averaged fwd. current, R-load, $T_A = 50^\circ C$ ¹⁾ | 3 | A |
| I_{FRM} | Repetitive peak forward current $f > 15 Hz$ ¹⁾ | 20 | A |
| I_{FSM} | Peak forward surge current 50 Hz half sinus-wave ³⁾ | 80 | A |
| i^2t | Rating for fusing, $t < 10 ms$ ³⁾ | 32 | A ² s |
| R_{thA} | Max. thermal resistance junction to ambient ¹⁾ | 25 | K/W |
| R_{thT} | Max. thermal resistance junction to terminals ¹⁾ | - | K/W |
| T_j | Operating junction temperature | -50...+150°C | °C |
| T_s | Storage temperature | -50...+175°C | °C |

| Characteristics | | $T_C = 25^\circ C$, unless otherwise specified | |
|-----------------|---|---|-------|
| Symbol | Conditions | Values | Units |
| I_R | Maximum leakage current, $T_j = 25^\circ C$; $V_R = V_{RRM}$ | <20 | µA |
| | $T_j = ^\circ C$; $V_R = V_{RRM}$ | | |
| C_j | Typical junction capacitance (at MHz and applied reverse voltage of V) | - | pF |
| Q_{rr} | Reverse recovery charge ($U_R = V$; $I_F = A$; $dI_F/dt = A/ms$) | - | µC |
| E_{RSM} | Non repetitive peak reverse avalanche energy ($I_R = mA$; $T_j = ^\circ C$; inductive load switched off) | - | mJ |



case: DO-201

