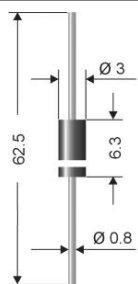


# BY 226S, BY 227S, BY 228S



**Axial lead diode**

## Standard silicon rectifier diodes

**BY 226S, BY 227S, BY 228S**

**Forward Current: 1,5 A**

**Reverse Voltage: 450 to 1500 V**

### Features

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

### Mechanical Data

- Plastic case DO-15 / DO-204AC
- Weight approx.: 0,4 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)  $I_F = 1,5 \text{ A}$ ,  $T_j = 25 \text{ °C}$

3)  $T_A = 25 \text{ °C}$

| Type   | Repetitive peak reverse voltage | Surge peak reverse voltage | Max. reverse recovery time                                  | Max. forward voltage |
|--------|---------------------------------|----------------------------|-------------------------------------------------------------|----------------------|
|        | $V_{RRM}$<br>V                  | $V_{RSM}$<br>V             | $I_F = -A$<br>$I_R = -A$<br>$I_{RR} = -A$<br>$t_{rr}$<br>ns | $V_F^{2)}$           |
| BY226S | 450                             | 650                        | -                                                           | 1,3                  |
| BY227S | 800                             | 1250                       | -                                                           | 1,3                  |
| BY228S | 1500                            | 1800                       | -                                                           | 1,3                  |

### Absolute Maximum Ratings

$T_c = 25 \text{ °C}$ , unless otherwise specified

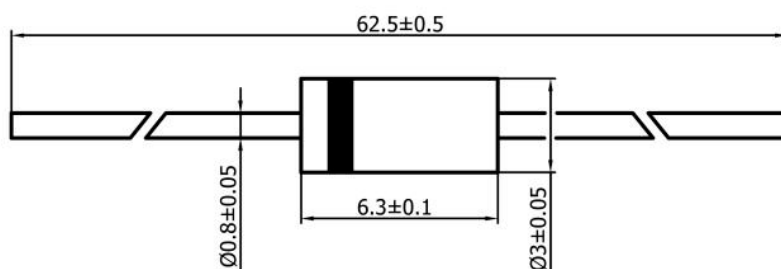
| Symbol    | Conditions                                                     | Values     | Units            |
|-----------|----------------------------------------------------------------|------------|------------------|
| $I_{FAV}$ | Max. averaged fwd. current, R-load, $T_A = 50 \text{ °C}^{1)}$ | 1,5        | A                |
| $I_{FRM}$ | Repetitive peak forward current $f > 15 \text{ Hz}^{1)}$       | 10         | A                |
| $I_{FSM}$ | Peak forward surge current 50 Hz half sinus-wave $^{3)}$       | 50         | A                |
| $i^2t$    | Rating for fusing, $t < 10 \text{ ms}^{3)}$                    | 12,5       | A <sup>2</sup> s |
| $R_{thA}$ | Max. thermal resistance junction to ambient $^{1)}$            | 45         | K/W              |
| $R_{thT}$ | Max. thermal resistance junction to terminals $^{1)}$          | -          | K/W              |
| $T_j$     | Operating junction temperature                                 | -50...+175 | °C               |
| $T_s$     | Storage temperature                                            | -50...+175 | °C               |

### Characteristics

$T_c = 25 \text{ °C}$ , unless otherwise specified

| Symbol    | Conditions                                                                                                   | Values | Units |
|-----------|--------------------------------------------------------------------------------------------------------------|--------|-------|
| $I_R$     | Maximum leakage current, $T_j = 25 \text{ °C}$ ; $V_R = V_{RRM}$                                             | <10    | µA    |
|           | $T_j = 100 \text{ °C}$ ; $V_R = V_{RRM}$                                                                     | <50    | µA    |
| $C_J$     | 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 ( $I_R = mA$ ; $T_j = \text{°C}$ ; inductive load switched off) | -      | mJ    |

Dimensions in mm



case: DO-15 / DO-204AC

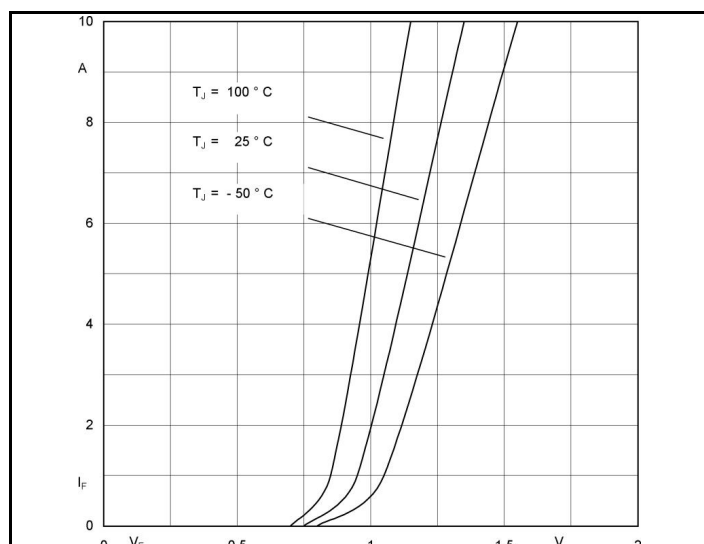


Fig. 1 Forward characteristic ( typical values )

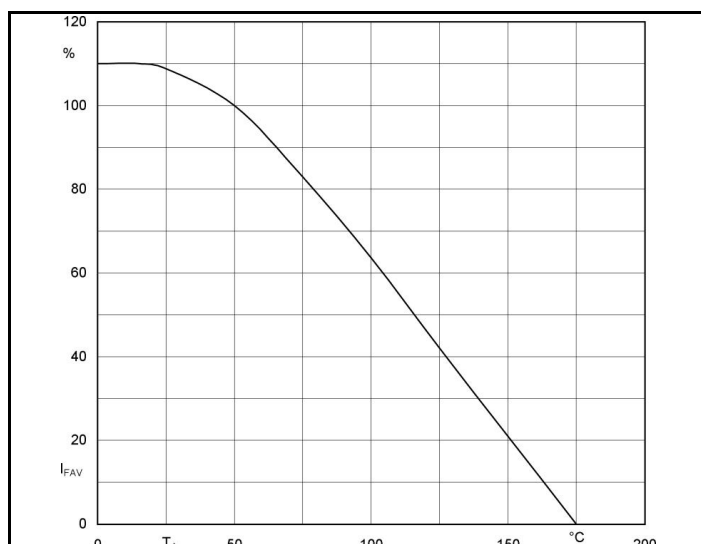


Fig. 2 Rated forward current vs. ambient temperature <sup>1)</sup>

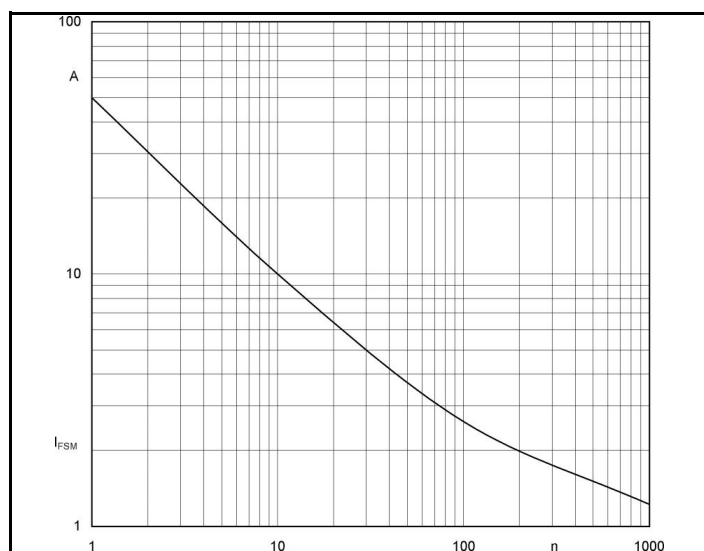


Fig. 3  $I_{FSM}$  current versus number of cycles at 50 Hz