

Switchmode Power Rectifier Schottky Diode [1N5830]

Technical Data

Typical applications : Ideally suited for use as Rectifiers in low voltage , High frequency invertors , Free wheeling diodes and polarity protection diodes.

| | | |
|---|----------------------|----------------------|
| Type No. | V_{RRM} (Volts) | V_{RSM} (Volts) |
| 1N5830 | 30 | 36 |
| V_{RRM} = Peak Repetitive Reverse Voltage V_{RSM} =Non-Repetitive Peak Reverse Voltage | | |

Features

- Extremely low V_F
- Low power loss / High efficiency
- **Low stored charge , Majority carrier conduction**
- **High surge capacity**

| Symbol | Conditions | Units |
|--|--|---|
| $I_{F(AV)}$ | $T_{case} = 85^\circ C$ | 25 A |
| I_{FSM} | $T_c = 25^\circ C$; 10 ms | 800 A |
| I_{RRM} | $T_c = 25^\circ C$ $T_c = 100^\circ C$ | 20 mA max 150 mA max |
| V_F | $T_{vj} = 25^\circ C$; $I_F = 10 A$ $T_{vj} = 25^\circ C$; $I_F = 25 A$ $T_{vj} = 25^\circ C$; $I_F = 78.5 A$ | 0.370 V max 0.460 V max 0.770 V max |
| $R_{th(j-c)}$ T_{vj} T_{stg} | | 1.75 $^\circ C/W$ 150 $^\circ C$ -65.....+ 125 $^\circ C$ |
| Mounting torque | | 2 Nm |
| Weight | Approx | 10 g |

