

Switchmode Power Rectifier Schottky Diode [1N5831]

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)
1N5831	40	48
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}	$T_c = 25^\circ C; 10\text{ ms}$	800 A
I_{RRM}	$T_c = 25^\circ C$ $T_c = 100^\circ C$	20 mA max 150 mA max
V_F	$T_{vj} = 25^\circ C; I_F = 10\text{ A}$ $T_{vj} = 25^\circ C; I_F = 25\text{ A}$ $T_{vj} = 25^\circ C; I_F = 78.5\text{ A}$	0.380 V max 0.480 V max 0.820 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

