

Technical Data
Data Sheet 2863, Rev. -

MBR3100 SCHOTTKY RECTIFIER

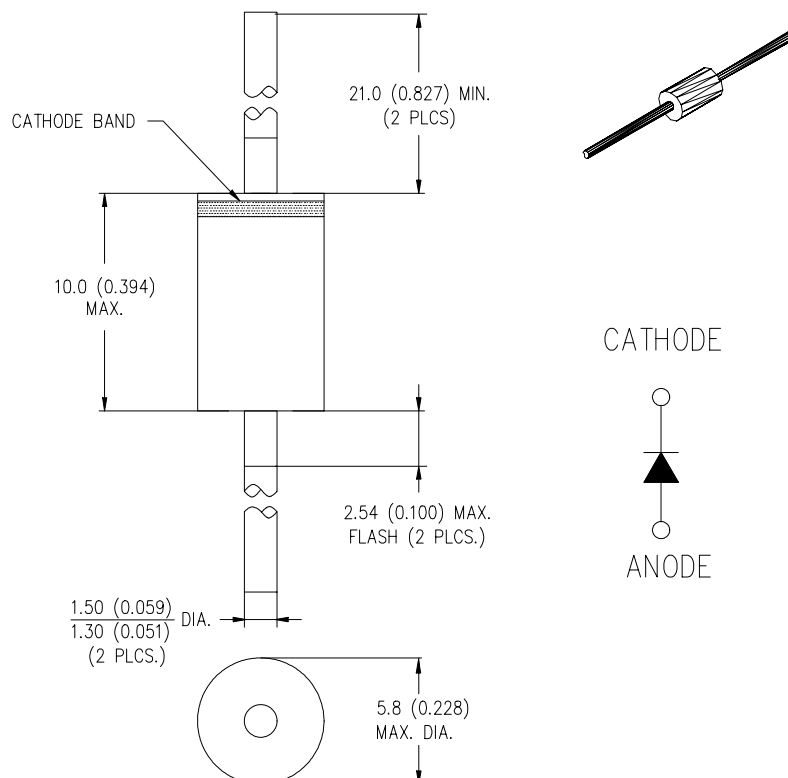
Applications:

- Switching power supply • Converters • Free-Wheeling diodes • Reverse battery protection

Features:

- Low profile, axial leaded outline
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Low forward voltage drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability

Mechanical Dimensions: In Inches / mm



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Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	100	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_L = 53.4\text{ }^{\circ}\text{C}$, rectangular wave form	3.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	180	A

Electrical Characteristics:

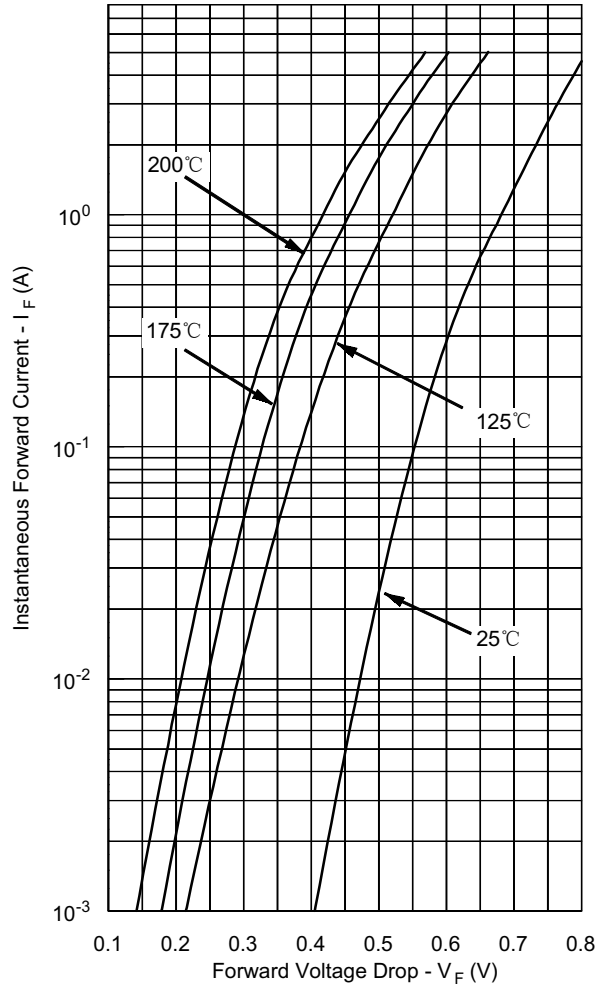
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@3 A, Pulse, $T_J = 25\text{ }^{\circ}\text{C}$	0.79	V
	V_{F2}	@3 A, Pulse, $T_J = 100\text{ }^{\circ}\text{C}$	0.69	V
Max. Reverse Current *	I_{R1}	@ V_R = Rated V_R , Pulse, $T_J = 25\text{ }^{\circ}\text{C}$	0.6	mA
	I_{R2}	@ V_R = Rated V_R , Pulse, $T_J = 125\text{ }^{\circ}\text{C}$	20	mA

* Pulse Width < 300 μ s, Duty Cycle < 2%**Thermal-Mechanical Specifications:**

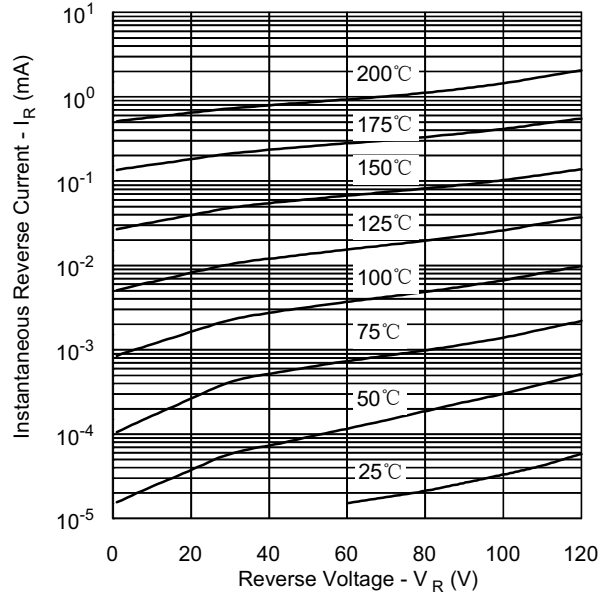
Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-40 to +150	$^{\circ}\text{C}$
Max. Storage Temperature	T_{stg}	-	-40 to +150	$^{\circ}\text{C}$
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	DC operation	28	$^{\circ}\text{C/W}$
Approximate Weight	wt	-	1.2	g
Case Style	DO-201AD			

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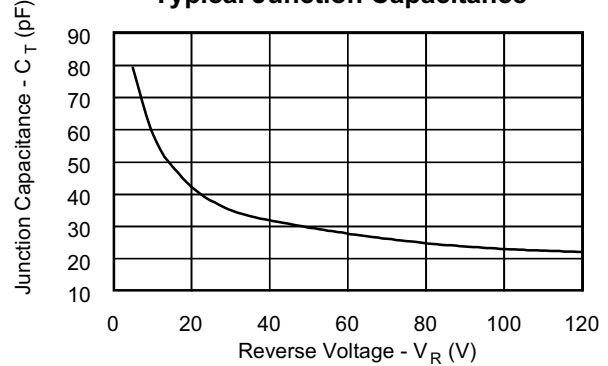
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



TECHNICAL DATA

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