

Technical Data  
Data Sheet 2865, Rev. -

## MBR350/MBR360 SCHOTTKY RECTIFIER

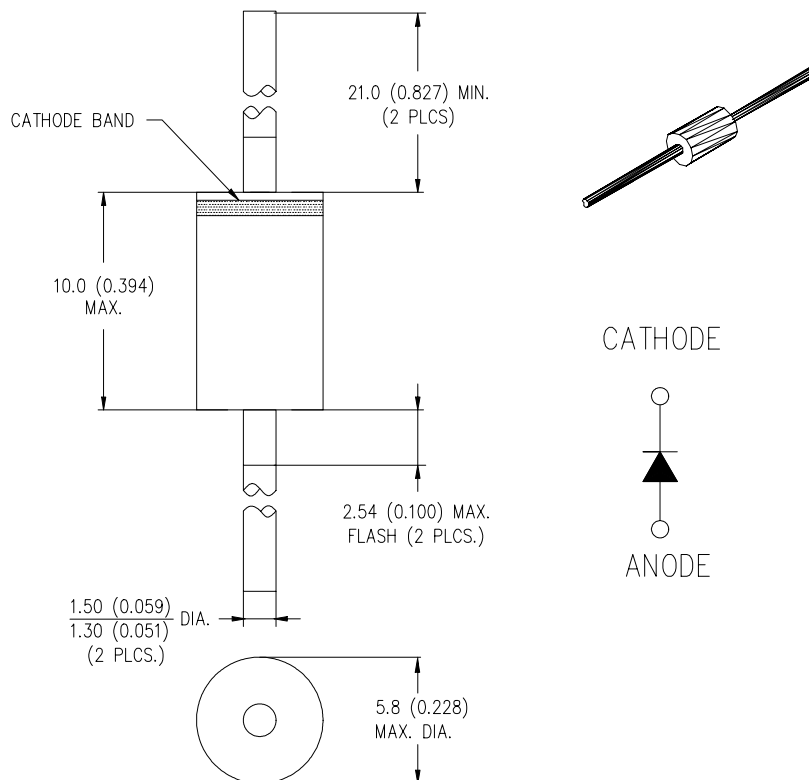
### Applications:

- 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
- Very Low forward voltage drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability

### Mechanical Dimensions: In Inches / mm



### DO-201AD

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Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	50	V
			(MBR350)	
			60	(MBR360)
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_C = 50\text{ }^\circ\text{C}$ , rectangular wave form	3.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 ms, half Sine pulse	96	A

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop *	$V_{F1}$	@1.0 A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.58	V
		@3.0 A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.73	
		@9.4 A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	1.06	
	$V_{F2}$	@1.0 A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.49	V
		@3.0 A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.64	
		@9.4 A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.89	
Max. Reverse Current *	$I_{R1}$	@ $V_R = \text{Rated } V_R$ , Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.6	mA
	$I_{R2}$	@ $V_R = \text{Rated } V_R$ , Pulse, $T_J = 100\text{ }^\circ\text{C}$	8	mA
	$I_{R3}$	@ $V_R = \text{Rated } V_R$ , Pulse, $T_J = 125\text{ }^\circ\text{C}$	15	mA
Max. Junction Capacitance	$C_T$	@ $V_R = 5\text{V}$ , $T_C = 25\text{ }^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$	190	pF
Typical Series Inductance	$L_S$	Measured lead to lead 5 mm from package body	9.0	nH
Max. Voltage Rate of Change (Rated $V_R$ )	dv/dt		10,000	V/ $\mu\text{s}$

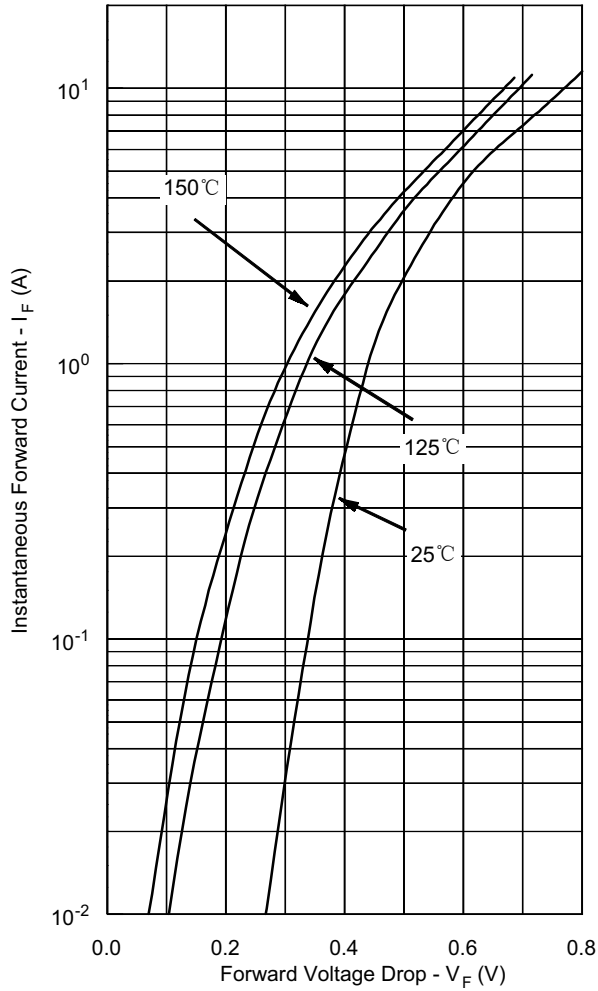
\* Pulse Width < 300 $\mu\text{s}$ , Duty Cycle < 2%

Thermal-Mechanical Specifications:

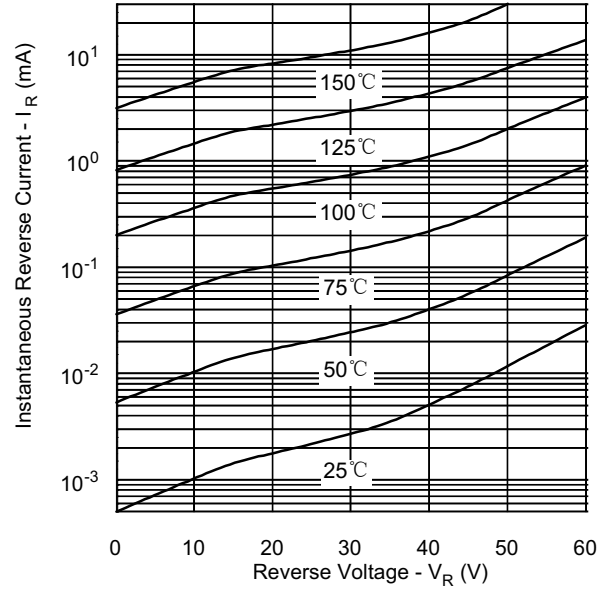
Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	$T_J$	-	-40 to +150	$^\circ\text{C}$
Max. Storage Temperature	$T_{stg}$	-	-40 to +150	$^\circ\text{C}$
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	DC operation	30	$^\circ\text{C/W}$
Approximate Weight	wt	-	1.2	g
Case Style		DO-201AD		

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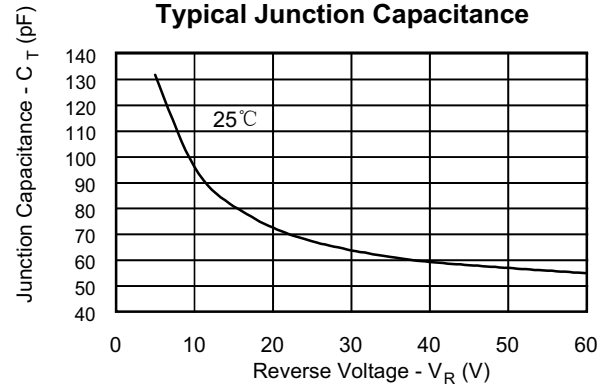
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



**TECHNICAL DATA**

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