

TECHNICAL DATA DATA SHEET 1010, REV. A

# HERMETIC POWER SCHOTTKY RECTIFIER Ultra Low Reverse Leakage 200°C Operating Temperature

## **Applications:**

• Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode

#### Features:

- Ultra low Reverse Leakage Current
- Soft Reverse Recovery at Low and High Temperature
- Very Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capacity
- Guard Ring for Enhanced Durability and Long Term Reliability
- Guaranteed Reverse Avalanche Characteristics

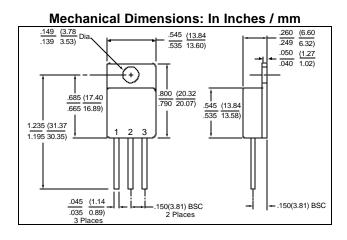
### **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	V <sub>RWM</sub> -		V
Max. Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave form	35	Α
Max. Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	I <sub>FSM</sub> 8.3 ms, half Sine wave		Α
Max. Junction Temperature	$T_J$	T <sub>J</sub> -		Ô
Max. Storage Temperature	T <sub>stg</sub>	-	-65 to +175	°C
Thermal Resistance	$R_{\theta JC}$	-	0.33	°C/W

#### **Electrical Characteristics:**

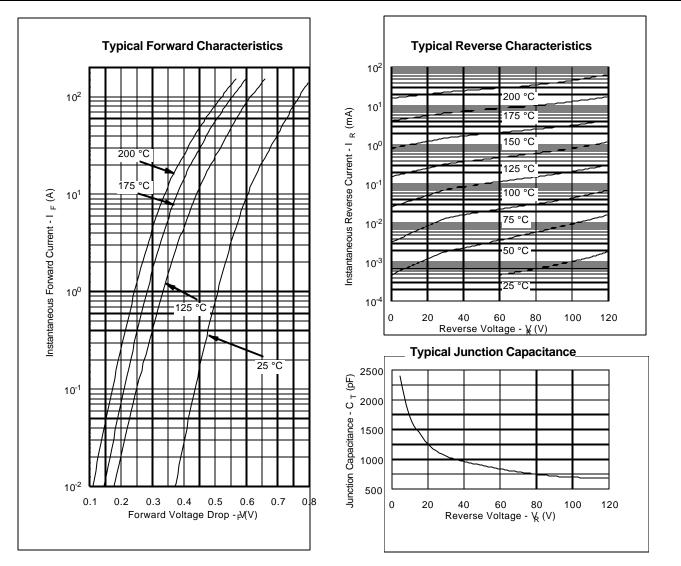
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V <sub>F1</sub>	@ 35A, Pulse, T <sub>J</sub> = 25 °C	0.97	V
	$V_{F2}$	@ 35A, Pulse, T <sub>J</sub> = 125 °C	0.79	V
Max. Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = 100V, Pulse,	0.6	mA
		$T_J = 25  ^{\circ}C$		
	$I_{R2}$	@V <sub>R</sub> = 100V, Pulse,	6.0	mA
		T <sub>J</sub> = 125 °C		
Max. Junction Capacitance	C <sub>T</sub>	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C	3000	pF
		$f_{SIG} = 1MHz,$ $V_{SIG} = 50mV (p-p)$		
		$V_{SIG} = 50 \text{mV (p-p)}$		

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TO-254

DEVICE TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE



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#### **TECHNICAL DATA**

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