

TECHNICAL DAT DATA SHEET 1008, REV. A

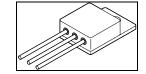
# HERMETIC POWER SCHOTTKY RECTIFIER Low Forward Voltage Drop (60 V, 35A)

# **Applications:**

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

#### Features:

- Soft Reverse Recovery at Low and High Temperature
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- 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	$V_{RWM}$	-	60	V
Max. Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle @T <sub>C</sub> =100°C, rectangular wave form	35	А
Max. Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine pulse	150	Α
Max. Junction Temperature	$T_J$	-	-65 to +150	°C
Max. Storage Temperature	T <sub>stq</sub>	-	-65 to +150	°C

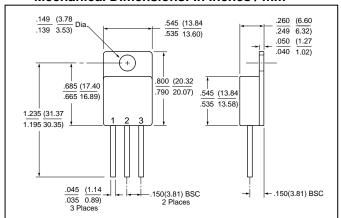
#### **Electrical Characteristics:**

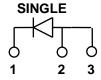
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 35 A, Pulse, T <sub>J</sub> = 25 °C	0.75	V
	$V_{F2}$	@ 35 A, Pulse, T <sub>J</sub> = 125 °C	0.64	V
Max. Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = 60V, Pulse,	9.0	mA
		T <sub>J</sub> = 25 °C		
	I <sub>R2</sub>	$@V_R = 60V$ , Pulse,	420	mA
		T <sub>J</sub> = 125 °C		
Max. Junction Capacitance	C <sub>T</sub>	$@V_R = 5V, T_C = 25  ^{\circ}C$	4800	pF
		$f_{SIG} = 1MHz,$		
		$V_{SIG} = 50 \text{mV (p-p)}$		
Maximum Thermal Resis.	$R_{\theta JC}$	-	0.33	°C/W

<sup>•</sup> World Wide Web Site - http://www.sensitron.com • E-Mail Address - sales@sensitron.com •

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#### Mechanical Dimensions: In Inches / mm





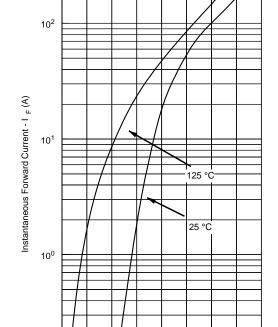
**TO-254** 

#### **PINOUT TABLE**

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

**Note:** The V<sub>f</sub> curves shown are for the un-packaged die only.

**Typical Forward Characteristics** 



10<sup>-1</sup>

0.0

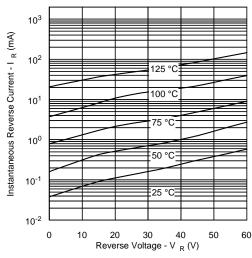
0.2

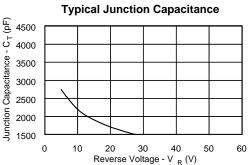
0.4

Forward Voltage Drop - V <sub>F</sub> (V)

0.6

# Typical Reverse Characteristics





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0.8

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