

TECHNICAL DATA  
DATA SHEET 1009, REV. C

**SILICON 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	$V_{RWM}$	-	100	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	16	A
Max. Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 ms, half Sine wave	75	A
Max. Junction Temperature	$T_J$	-	-65 to +200	°C
Max. Storage Temperature	$T_{stg}$	-	-65 to +175	°C
Thermal Resistance	$R_{\theta JC}$	-	0.77	°C/W

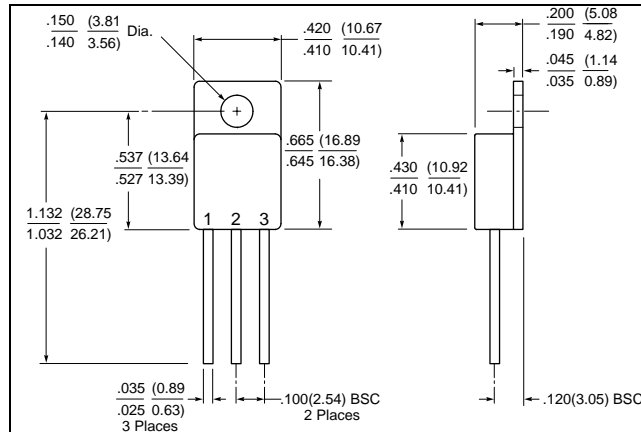
**Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 16A, Pulse, $T_J = 25\text{ °C}$	0.90	V
	$V_{F2}$	@ 16A, Pulse, $T_J = 125\text{ °C}$	0.71	V
Max. Reverse Current	$I_{R1}$	@ $V_R = 100V$ , Pulse, $T_J = 25\text{ °C}$	0.2	mA
	$I_{R2}$	@ $V_R = 100V$ , Pulse, $T_J = 125\text{ °C}$	2.0	mA
Max. Junction Capacitance	$C_T$	@ $V_R = 5V$ , $T_C = 25\text{ °C}$ $f_{SIG} = 1MHz$ , $V_{SIG} = 50mV$ (p-p)	1000	pF

**SENSITRON  
SEMICONDUCTOR**

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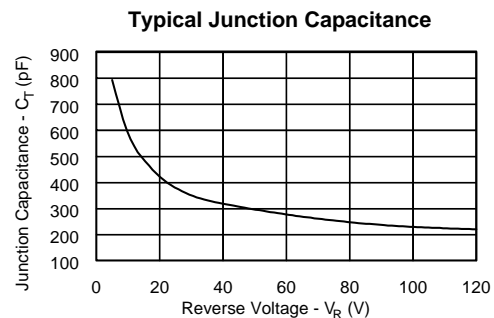
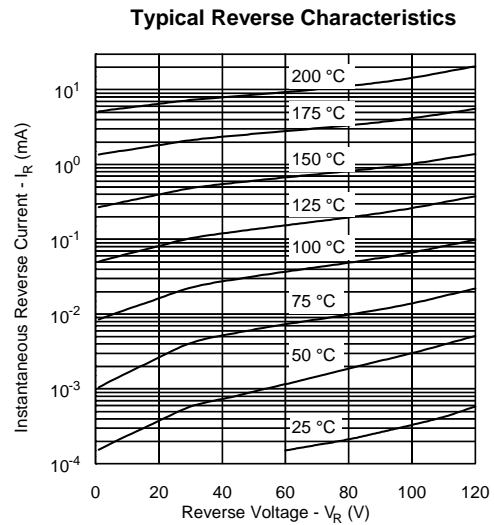
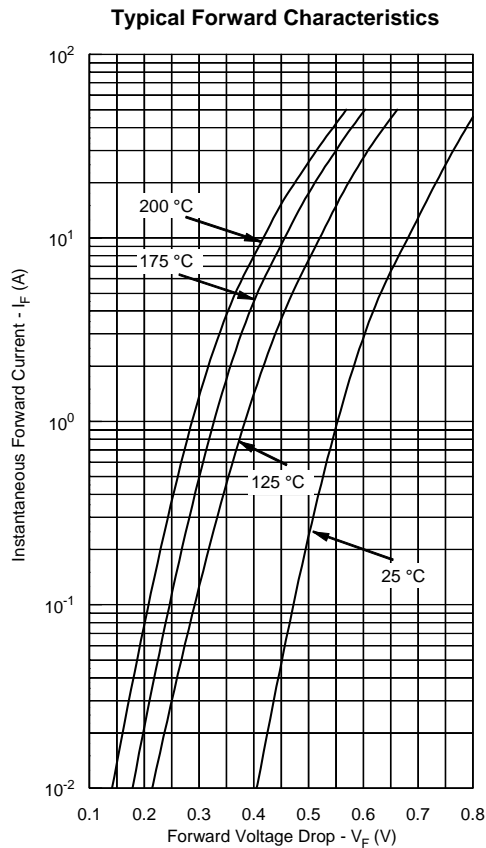
**Mechanical Dimensions: In Inches / mm**



**TO-257**

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

V<sub>f</sub> curves are for unpackaged die



# **SENSITRON SEMICONDUCTOR**

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