TECHNICAL DATA DATA SHEET 4807, REV. A

# SILICON SCHOTTKY RECTIFIER Ultra Low Reverse Leakage 150°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

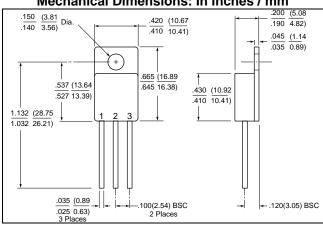
### Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V <sub>RWM</sub>	-	45	V
Max. Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave form	16	A
Max. Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine wave	200	A
Max. Junction Temperature	ΤJ	-	-65 to +150	°C
Max. Storage Temperature	T <sub>stg</sub>	-	-65 to +150	°C
Thermal Resistance	$R_{ ext{ heta}JC}$	-	1.15	°C/W

# **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V <sub>F1</sub>	@ 16A, Pulse, T <sub>J</sub> = 25 °C	0.65	V
	$V_{F2}$	@ 16A, Pulse, T <sub>J</sub> = 125 °C	0.61	V
Max. Reverse Current	I <sub>R1</sub>	$@V_R = 45V$ , Pulse,	0.1	mA
		$T_J = 25 \ ^{\circ}C$		
	I <sub>R2</sub>	$@V_R = 45V$ , Pulse,	50	mA
		T <sub>J</sub> = 125 °C		
Max. Junction Capacitance	CT	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C	2300	pF
		f <sub>SIG</sub> = 1MHz,		
		$V_{SIG} = 50 \text{mV} (\text{p-p})$		

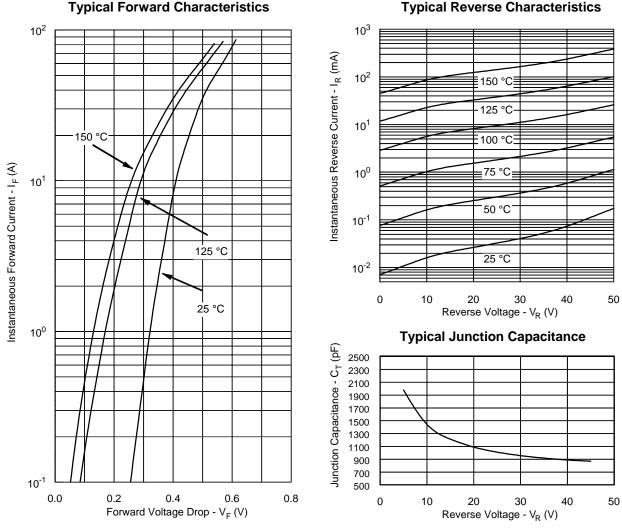
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#### Mechanical Dimensions: In Inches / mm



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



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#### **Typical Reverse Characteristics**



#### **TECHNICAL DATA**

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