TECHNICAL DATA DATA SHEET 4787, REV. B

# 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
- 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

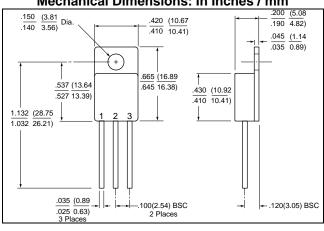
# **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V <sub>RWM</sub>	-	200	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	75	A
Max. Junction Temperature	ΤJ	-	-65 to +200	°C
Max. Storage Temperature	T <sub>stg</sub>	-	-65 to +200	°C
Thermal Resistance	$R_{ ext{ heta}JC}$	-	0.77	°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	0.96	V
	V <sub>F2</sub>	@ 16A, Pulse, T <sub>J</sub> = 125 °C	0.80	V
Max. Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = 200V, Pulse,	0.2	mA
		T <sub>J</sub> = 25 °C		
	I <sub>R2</sub>	@V <sub>R</sub> = 200V, Pulse,	2.0	mA
		T <sub>J</sub> = 125 °C		
Max. Junction Capacitance	CT	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C	600	pF
		f <sub>SIG</sub> = 1MHz,		
		$V_{SIG} = 50 \text{mV} (\text{p-p})$		

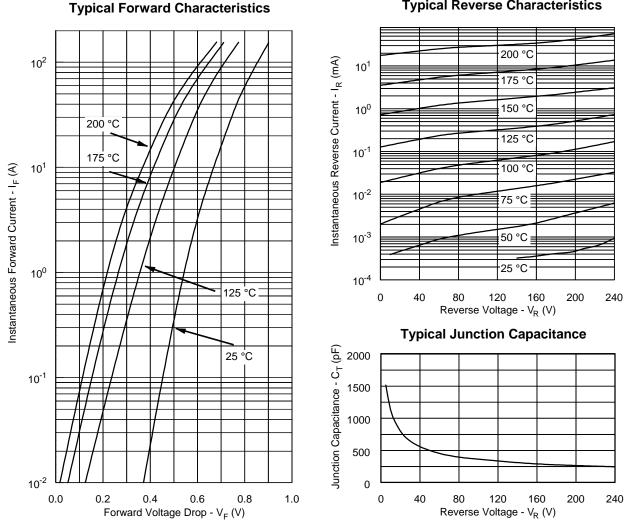
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#### Mechanical Dimensions: In Inches / mm



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



**Typical Reverse Characteristics** 

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