

TECHNICAL DATA DATA SHEET 4786, REV. B

# SILICON SCHOTTKY RECTIFIER Ultra Low Reverse Leakage 175°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

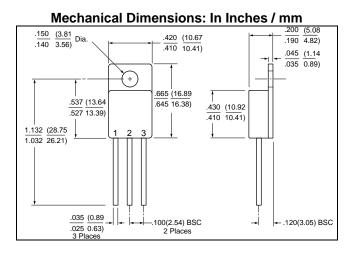
# **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	60	V
Max. Average Forward Current	I <sub>F(AV)</sub>	I <sub>F(AV)</sub> 50% duty cycle, rectangular wave form		Α
Max. Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	I <sub>FSM</sub> 8.3 ms, half Sine wave		А
Max. Junction Temperature	TJ	-	-65 to +175	°C
Max. Storage Temperature	T <sub>stg</sub>	-	-65 to +175	°C
Thermal Resistance	$R_{ heta JC}$	-	0.77	°C/W

## **Electrical Characteristics:**

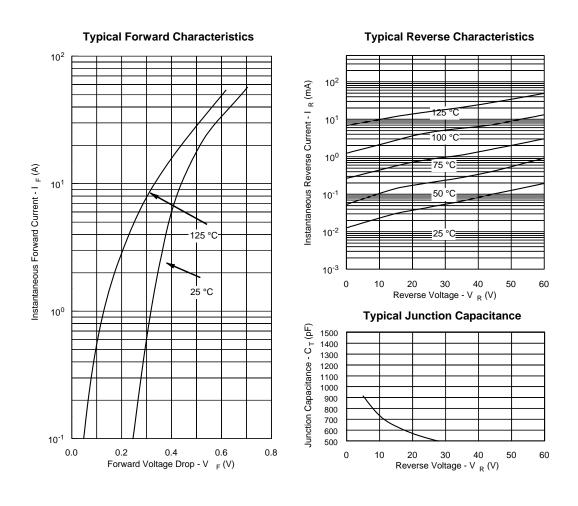
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 16A, Pulse, T <sub>J</sub> = 25 °C	0.74	V
	$V_{F2}$	@ 16A, Pulse, T <sub>J</sub> = 125 °C	0.64	V
Max. Reverse Current	I <sub>R1</sub>	$@V_R = 60V$ , Pulse,	0.8	mA
		T <sub>J</sub> = 25 °C		
	$I_{R2}$	@V <sub>R</sub> = 60V, Pulse,	60	mA
		T <sub>J</sub> = 125 °C		
Max. Junction Capacitance C <sub>T</sub>		$@V_R = 5V, T_C = 25  ^{\circ}C$	1600	pF
		$f_{SIG} = 1MHz,$		
		$V_{SIG} = 50 \text{mV (p-p)}$		

## TECHNICAL DATA DATA SHEET 4786, REV. A



**TO-257** 

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



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