

TECHNICAL DATA DATA SHEET 4544, REV. B

# SILICON SCHOTTKY RECTIFIER- Common Cathode 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

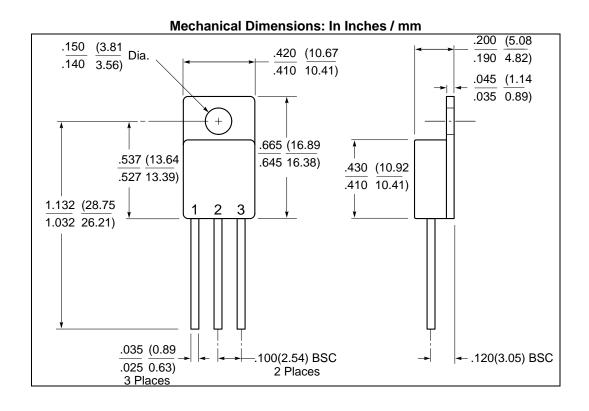
# **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	45	V
Max. Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave form	8	А
Max. Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine wave	100	А
Max. Junction Temperature	$T_J$	-	-65 to +175	°C
Max. Storage Temperature	T <sub>stg</sub>	-	-65 to +175	°C
Thermal Resistance	$R_{\theta JC}$	-	2.5	°C/W

## **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 10A, Pulse, T <sub>J</sub> = 25 °C	0.85	V
	$V_{F2}$	@ 10A, Pulse, T <sub>J</sub> = 125 °C	0.70	V
Max. Reverse Current	I <sub>R1</sub>	$@V_R = 45V$ , Pulse,	1	mA
		$T_J = 25  ^{\circ}C$		
	$I_{R2}$	$@V_R = 45V$ , Pulse,	15	mA
		T <sub>J</sub> = 125 °C		
Max. Junction Capacitance	C <sub>T</sub>	$@V_R = 5V, T_C = 25  ^{\circ}C$	500	pF
		$f_{SIG} = 1MHz,$		
		$V_{SIG} = 50 \text{mV (p-p)}$		

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# TO-257

<b>DEVICE TYPE</b>	PIN 1	PIN 2	PIN 3	
DUAL RECTIFIER	ANODE	CATHODE	ANODE	
(Common Cathode)				

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