

**1N6844**

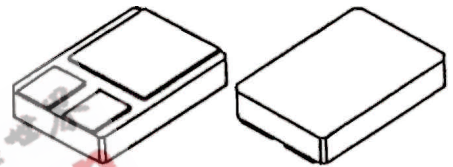
**100 VOLTS, 20 AMP  
 SCHOTTKY RECTIFIER  
 CERAMIC SURFACE MOUNT**

**DESIGNER'S DATA SHEET**

**FEATURES:**

- Low Profile Ceramic SMD
- High Surge Rating
- Low Reverse Leakage Current
- Low Forward Voltage
- Seam Welded Package
- Low Capacitance
- Ultrasonic Aluminum Wire Bonds

**SMD-0.5**



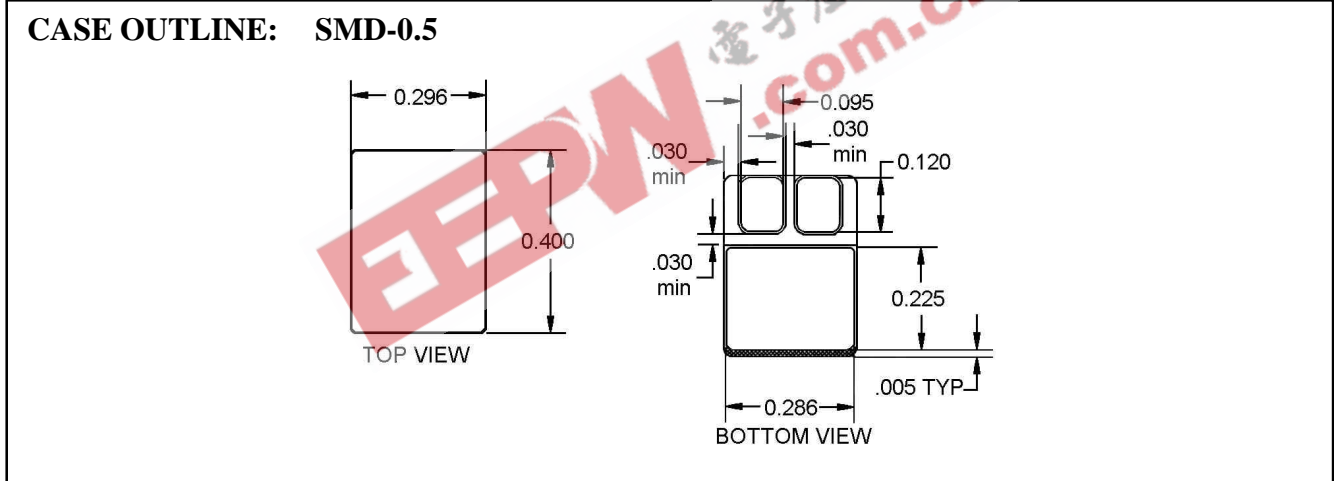
**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
<b>Peak Repetitive Reverse and DC Blocking Voltage</b>  <b>1N6844</b>	$V_{RRM}$  $V_{RWN}$  $V_R$	  <b>100</b>	  <b>Volts</b>
<b>Average Rectified Forward Current</b>  (Resistive Load, 60Hz, Sine Wave, TA = 25°C)	$I_o$	<b>20</b>	<b>Amps</b>
<b>Peak Surge Current</b>  (8.3 ms Pulse, TA = 25°C, per leg)	$I_{FSM}$	<b>250</b>	<b>Amps</b>
<b>Operating &amp; Storage Temperature</b>	<b>Top &amp; Tstg</b>	<b>-55 to +175</b>	<b>°C</b>
<b>Maximum Thermal Resistance</b> Junction to Case,	$R_{\theta JC}$	<b>2.0</b>	<b>°C/W</b>

1/4/00

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAX.	UNIT
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 5 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , 300us Pulse) ( $I_F = 15 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , 300μs Pulse) ( $I_F = 20 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , 300μs Pulse)	$V_F$	0.70 0.90 1.0	Vdc
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 5 \text{ Adc}$ , $T_A = 100^\circ\text{C}$ , 300μs Pulse) ( $I_F = 5 \text{ Adc}$ , $T_A = -55^\circ\text{C}$ , 300μs Pulse)	$V_F$	0.63 0.85	Vdc
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ\text{C}$ , 300μs pulse minimum)	$I_R$	50	μA
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ\text{C}$ , 300μs pulse minimum)	$I_R$	10	mA
<b>Junction Capacitance</b> $V_R = 10\text{Vdc}$ , $T_A = 25^\circ\text{C}$ , $f = 1 \text{ MHz}$	$C_J$	600	Pf



**TYPICAL OPERATING CURVES**  
 (TA=25°C Unless otherwise specified)

