

1N6844

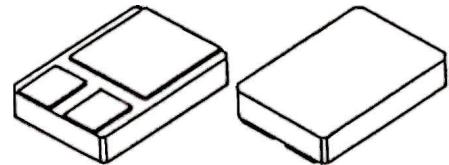
DESIGNER'S DATA SHEET

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

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

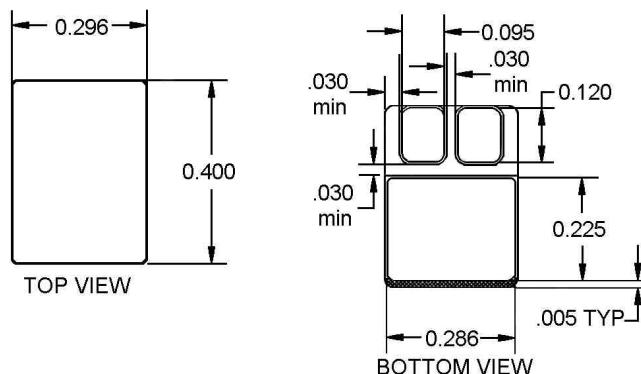
RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage 1N6844	V_{RRM} V_{RWN} V_R	100	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA = 25°C)	I_o	20	Amps
Peak Surge Current (8.3 ms Pulse, TA = 25°C, per leg)	I_{FSM}	250	Amps
Operating & Storage Temperature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

1/4/00

ELECTRICAL CHARACTERISTICS

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

CASE OUTLINE: SMD-0.5



TYPICAL OPERATING CURVES

(TA=25°C Unless otherwise specified)

