

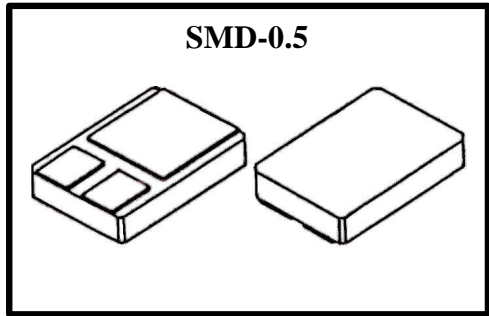
**1N6845**

**45 VOLTS, 40 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



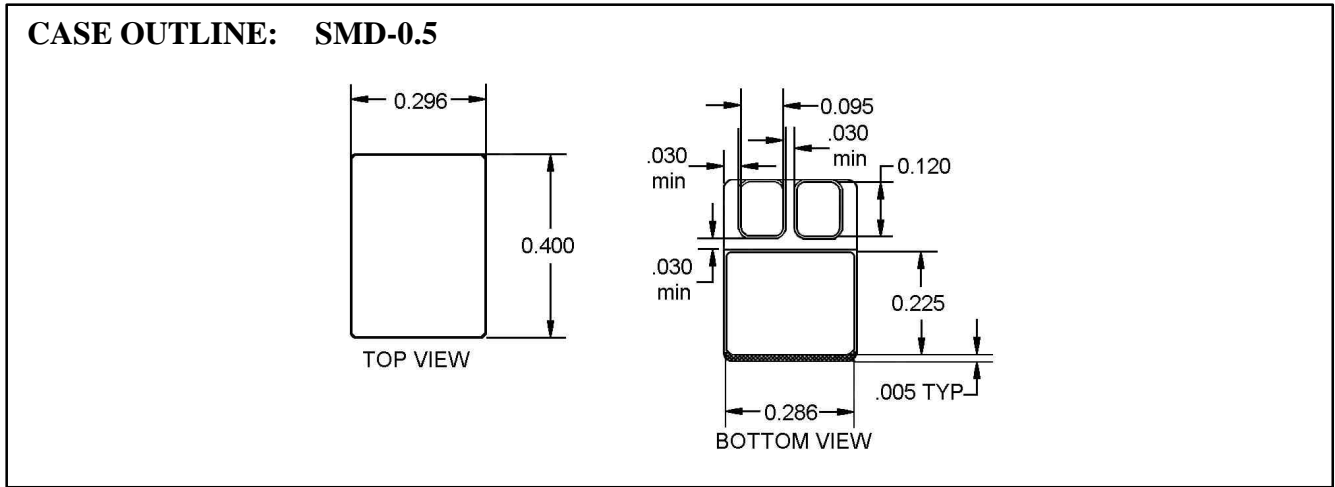
**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage  1N6845	$V_{RRM}$  $V_{RWN}$  $V_R$	45	Volts
Average Rectified Forward Current  (Resistive Load, 60Hz, Sine Wave, TA = 25°C)	$I_o$	40	Amps
Peak Surge Current  8.3 ms Pulse, TA = 25°C	$I_{FSM}$	400	Amps
Operating & Storage Temperature	Top & Tstg	-55 to +150	°C
Maximum Thermal Resistance Junction to Case,	$R_{\theta JC}$	2.0	°C/W

1/4/00

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAX.	UNIT
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 10 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse) ( $I_F = 20 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse) ( $I_F = 40 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)	$V_F$	0.65 0.72 0.86	Vdc
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 20 \text{ Adc}$ , $T_A = 100^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse) ( $I_F = 20 \text{ Adc}$ , $T_A = -55^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)	$V_F$	0.65 0.78	Vdc
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ pulse minimum)	$I_R$	100	$\mu\text{A}$
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ\text{C}$ , 300 $\mu\text{s}$ pulse minimum)	$I_R$	10	mA
<b>Junction Capacitance</b> ( $V_R = 10\text{Vdc}$ , $T_A = 25^\circ\text{C}$ , $f = 1 \text{ MHz}$ )	$C_J$	800	Pf



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

