

# 1N6840 AND 1N6841

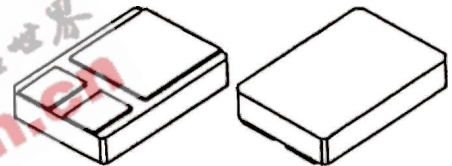
## DESIGNER'S DATA SHEET

### FEATURES:

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

35 and 45 VOLTS, 10 AMP  
DUAL SCHOTTKY  
COMMON CATHODE  
CENTERTAP RECTIFIER

SMD-0.5



## MAXIMUM RATINGS (per leg)

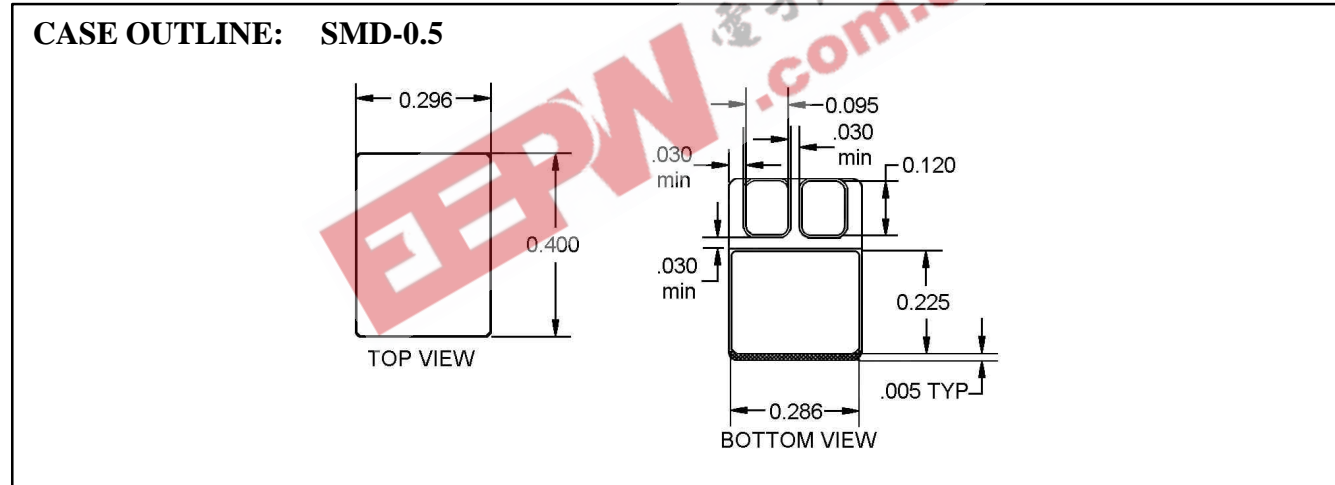
RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage  1N6840 1N6841	$V_{RRM}$ $V_{RWN}$ $V_R$	35 45	Volts
Average Rectified Forward Current  (Resistive Load, 60Hz, Sine Wave, $T_A = 25^\circ\text{C}$ )	$I_o$	10	Amps
Peak Surge Current  (8.3 ms Pulse, $T_A = 25^\circ\text{C}$ , per leg)	$I_{FSM}$	200	Amps
Operating & Storage Temperature	Top & Tstg	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case, each individual diode Junction to Case <i>Note 1</i>	$R_{\theta JC}$	2.8 1.7	$^\circ\text{C/W}$

Note 1: Both legs tied together  
8/2/99

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**ELECTRICAL CHARACTERISTICS (per leg)**

CHARACTERISTICS	SYMBOL	MAX.	UNIT
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 3 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , 300us Pulse) ( $I_F = 10 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , 300μs Pulse) ( $I_F = 20 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , 300μs Pulse)	$V_F$	<b>0.62</b> <b>0.75</b> <b>0.88</b>	<b>Vdc</b>
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 10 \text{ Adc}$ , $T_A = 100^\circ\text{C}$ , 300μs Pulse) ( $I_F = 20 \text{ Adc}$ , $T_A = 100^\circ\text{C}$ , 300μs Pulse)	$V_F$	<b>0.63</b> <b>0.70</b>	<b>Vdc</b>
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ\text{C}$ , 300μs pulse minimum)	$I_R$	<b>100</b>	<b>μA</b>
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ\text{C}$ , 300μs pulse minimum)	$I_R$	<b>10</b>	<b>mA</b>
<b>Junction Capacitance</b> $V_R = 10\text{Vdc}$ , $T_A = 25^\circ\text{C}$ , $f = 1 \text{ MHz}$	$C_J$	<b>400</b>	<b>Pf</b>



**TYPICAL OPERATING CURVES**  
( $T_A = 25^\circ\text{C}$  Unless otherwise specified)

