



# SOLID STATE DEVICES, INC.

14830 Valley View Blvd \* La Mirada, Ca 90638  
Phone: (562) 404-7855 \* Fax: (562) 404-1773  
ssdi@ssdi-power.com \* www.ssdi-power.com

## Designer's Data Sheet

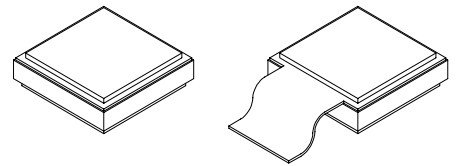
### FEATURES:

- Low Reverse Leakage
- Low Forward Voltage Drop
- Hermetically Sealed Power Surface Mount Package
- Guard Ring for Overvoltage Protection
- Eutectic Die Attach
- 175°C Operating Temperature
- TX, TXV and Space Level Screening Available

# SED10HB45 SED10HE45

## 10 AMP 45 VOLTS SCHOTTKY RECTIFIER

SEDPACK 1



Maximum Ratings	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	45	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, $T_C = 100^\circ\text{C}$ )	$I_o$	10	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on $I_o$ , allow junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$ )	$I_{FSM}$	175	Amps
Operating and Storage Temperature	Top & Tstg	-55 TO +175	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	1.25	$^\circ\text{C/W}$

NOTE: All specifications are subject to change without notification.  
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: **RS00020** Sheet4U.com

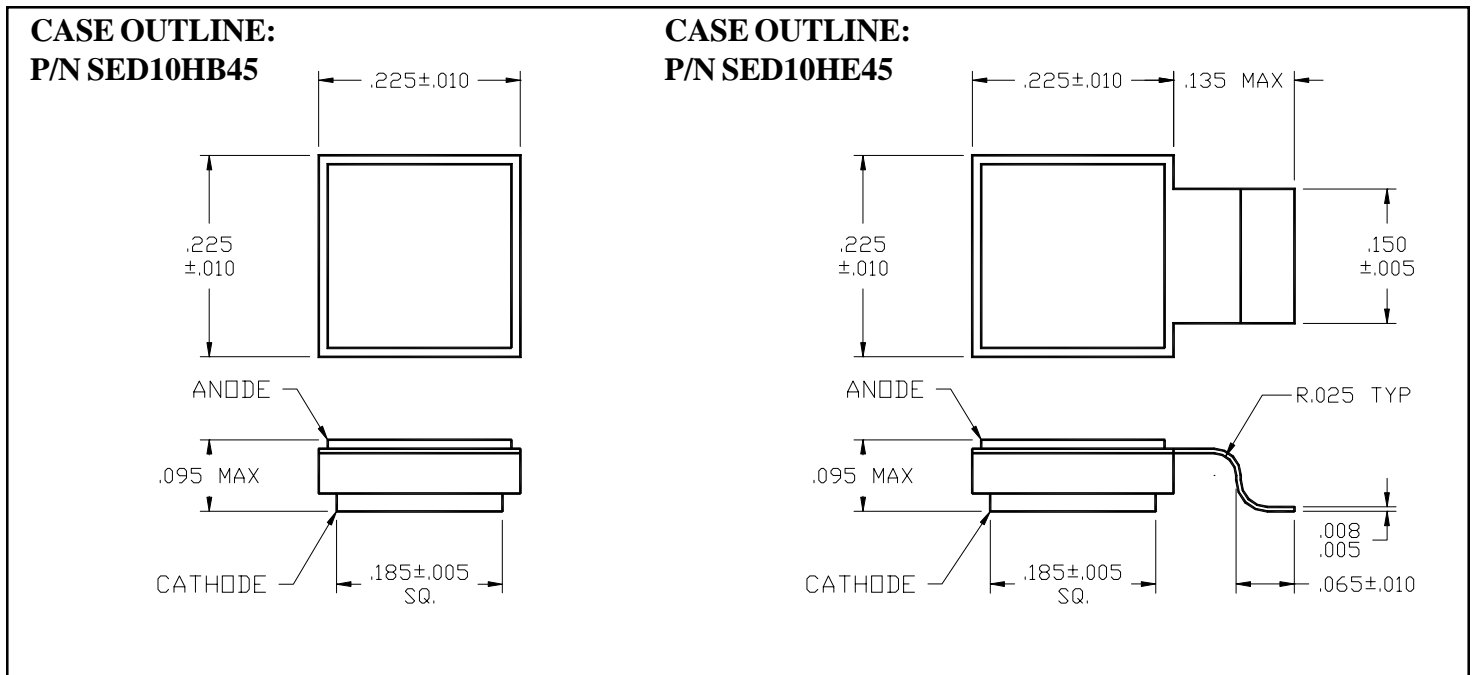
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Electrical Characteristics	SYMBOL	MAXIMUM	UNITS
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 10A_{DC}$ , $T_A = 25^\circ C$ , 300 - 500 $\mu s$ Pulse)	$V_{F1}$	<b>0.55</b>	$V_{DC}$
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 10A_{DC}$ , $T_A = +125^\circ C$ , 300 - 500 $\mu s$ Pulse)	$V_{F2}$	<b>0.49</b>	$V_{DC}$
<b>Reverse Leakage Current</b> (Rated $V_R$ , 300 $\mu s$ pulse minimum)	$T_A = 25^\circ C$ $I_{R1}$	<b>2.0</b>	<b>mA</b>
	$T_A = 125^\circ C$ $I_{R2}$	<b>15</b>	
<b>Junction Capacitance</b> ( $V_R = 5V_{DC}$ , $T_A = 25^\circ C$ , $f = 1MHz$ )	$C_J$	<b>900</b>	<b>pF</b>



**TYPICAL OPERATING CURVES**

( $T_A = 25^\circ C$  unless otherwise specified)

