



PRELIMINARY

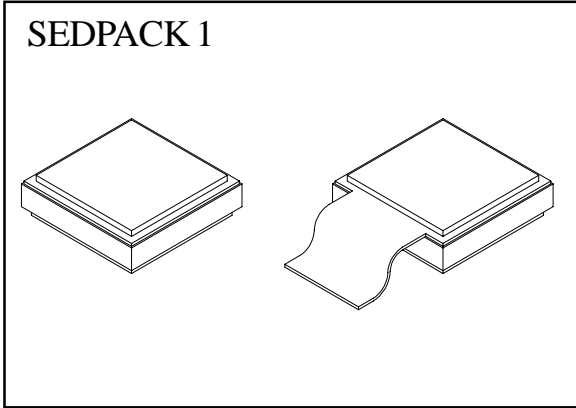
**SOLID STATE DEVICES, INC.**

14830 Valley View Blvd \* La Mirada, Ca 90638  
Phone: (562) 404-7855 \* Fax: (562) 404-1773

**Designer's Data Sheet**

**SED20HB100  
SED20HE100**

**20 AMP  
100 VOLTS  
SCHOTTKY  
RECTIFIER**



- 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**

Maximum Ratings	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	100	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, $T_C = 100^\circ\text{C}$ )	$I_o$	20	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	$R_{\theta JC}$	1.3	$^\circ\text{C/W}$

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

**DATA SHEET #: SH0024A**

# SED20HB100 SED20HE100

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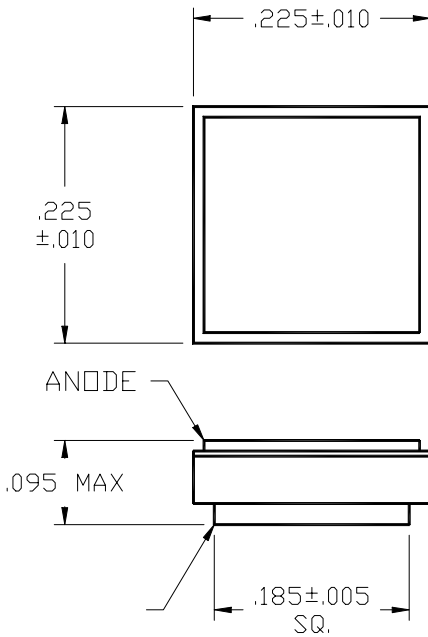


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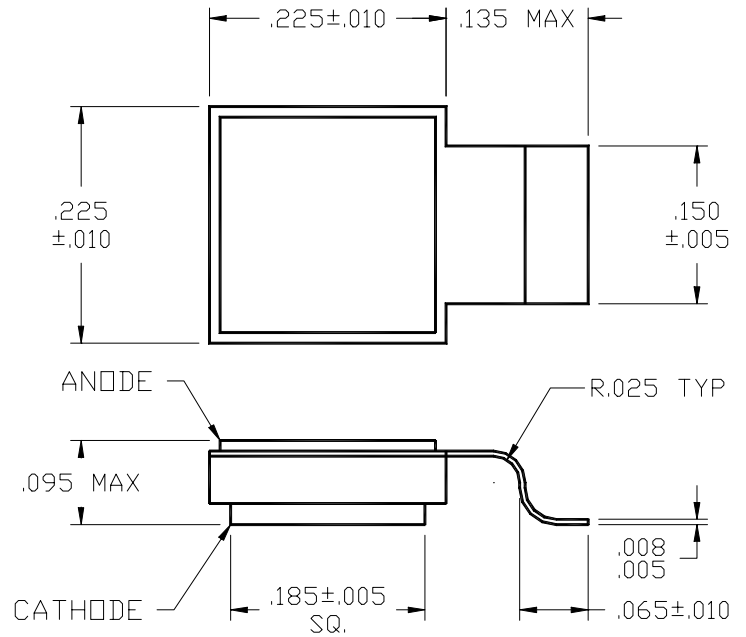
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Electrical Characteristics		SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop ( $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse minimum)	$I_F = 10A_{DC}$	$V_{F1}$	0.78	$V_{DC}$
	$I_F = 20A_{DC}$	$V_{F2}$	0.87	
Instantaneous Forward Voltage Drop ( $T_A = +125^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse minimum)	$I_F = 10A_{DC}$	$V_{F3}$	0.63	$V_{DC}$
	$I_F = 20A_{DC}$	$V_{F4}$	0.70	
Reverse Leakage Current (Rated $V_R$ , 300 $\mu\text{sec}$ Pulse minimum)	$T_A = 25^\circ\text{C}$	$I_{R1}$	1.5	mA
	$T_A = 100^\circ\text{C}$	$I_{R2}$	10	
Junction Capacitance ( $V_R = 10V_{DC}$ , $T_A = 25^\circ\text{C}$ , $f = 1\text{MHz}$ )		$C_J$	600	pF

### CASE OUTLINE: P/N SED20HB100



### CASE OUTLINE: P/N SED20HE100



### TEMPERATURE DERATING CURVE

