



SOLID STATE DEVICES, INC.

14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

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Designer's Data Sheet

FEATURES:

Optimized for 2.1V and 3.3V output power supplies. The SUPER SCHOTTKY series has been designed to provide ultra low forward voltage drops at low operating temperatures of 75°C.

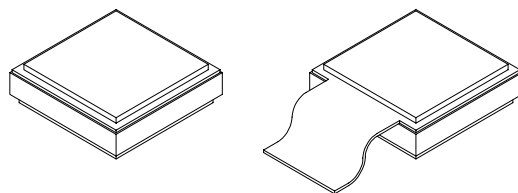
- **Low V_F , less than 340mV at 75°C**
- **Low Reverse Leakage**
- **Surface Mountable**
- **Guard Ring for Overvoltage Protection and Ruggedness**
- **100°C Operating Temperature**
- **Hermetic Package**
- **TX, TXV and Space Level Screening Available**

Typical applications include parallel switching power supplies, converters, battery protection circuits, and redundant power sub-systems.

SED20HB25
SED20HE25

20 AMP
25 VOLTS
SUPER SCHOTTKY
RECTIFIER

SEDPACK 1



Maximum Ratings	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	25	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, $T_J = 75^\circ\text{C}$)	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, $T_J = 25^\circ\text{C}$)	I_{FSM}	120	Amps
Operating and Storage Temperature	Top & Tstg	-55 TO +100	°C
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	1.25	°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 #: SH0011B

SED20HB25 SED20HE25

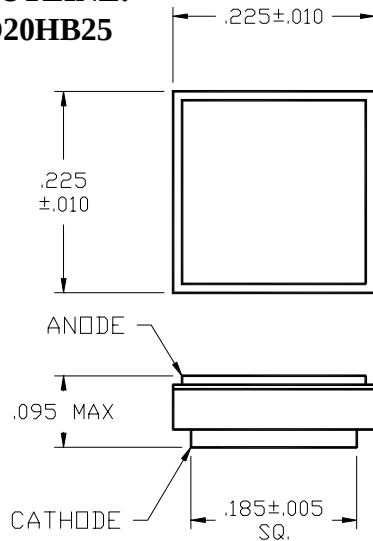


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Electrical Characteristics		SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop ($T_J = 25^\circ\text{C}$, 300 - 500 μs pulse)	$I_F = 10\text{A}_{\text{DC}}$	V_{F1}	0.390	V_{DC}
	$I_F = 20\text{A}_{\text{DC}}$	V_{F2}	0.465	
Instantaneous Forward Voltage Drop ($T_J = 75^\circ\text{C}$, 300 - 500 μs pulse)	$I_F = 10\text{A}_{\text{DC}}$	V_{F3}	0.340	V_{DC}
Reverse Leakage Current ($T_J = 25^\circ\text{C}$, 300 μsec pulse minimum)	$V_R = 3.3V_{\text{DC}}$	I_{R1}	250	μA mA
	$V_R = 25V_{\text{DC}}$	I_{R2}	1.0	
Reverse Leakage Current ($T_J = 75^\circ\text{C}$, 300 μsec pulse minimum)	$V_R = 3.3V_{\text{DC}}$	I_{R3}	8	mA
	$V_R = 25V_{\text{DC}}$	I_{R4}	20	
Reverse Leakage Current ($T_J = 100^\circ\text{C}$, 300 μsec pulse minimum)	$V_R = 3.3V_{\text{DC}}$	I_{R5}	35	mA
	$V_R = 25V_{\text{DC}}$	I_{R6}	100	
Junction Capacitance ($V_R = 5V_{\text{DC}}$, $T_J = 25^\circ\text{C}$, $f = 1\text{MHz}$)		C_J	900	pF

CASE OUTLINE: P/N SED20HB25



CASE OUTLINE: P/N SED20HE25

