Solid State Devices, Inc.
14701 Firestone Blvd. * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SED20HB100
SED20HE100

Designer's Data Sheet

Part Number / Ordering Information [1/]

SED20 __ 100 __

- **Screening**[2/] = None, TX = TX Level, TXV = TXV Level, S = S Level
- **Configuration**: HB = without lead, HE = with lead

20 AMP
100 VOLTS
SCHOTTKY RECTIFIER

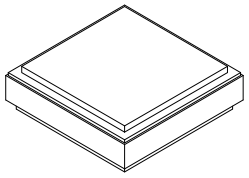
FEATURES:

- 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[2/]

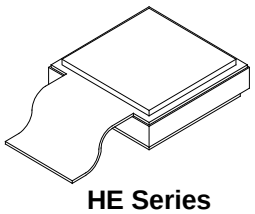
MAXIMUM RATINGS	Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	**Volts**
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, T_A = 100°C)	I_O	20	**Amps**
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, Superimposed on I_O, Allow Junction to Reach Equilibrium between Pulses, T_A = 25°C)	I_{FSM}	175	**Amps**
Operating and Storage Temperature	T_{OP} & T_{stg}	-55 to +175	**°C**
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	1.25	**°C/W**

Notes:
1/ For Ordering Information, Price, Operating Curves, and Availability – Contact Factory.
2/ Screening to MIL-PRF-19500.

SEDPACK 1



HB Series



HE Series

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SED20HB100
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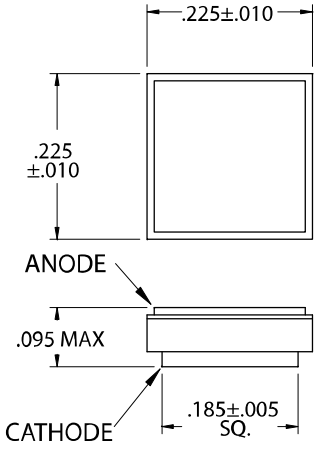
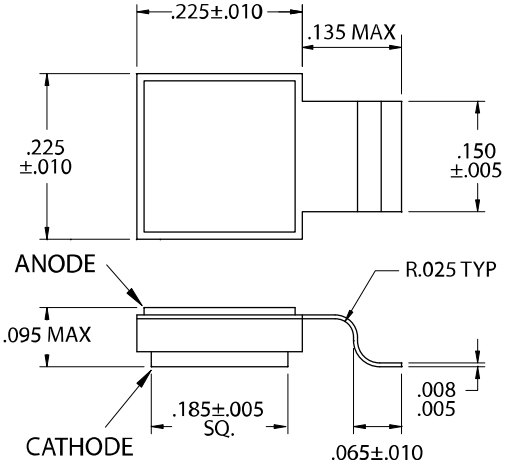
ELECTRICAL CHARACTERISTICS		Symbol	Maximum	Unit
Instantaneous Forward Voltage Drop (T_A = 25°C, 300-500 μsec Pulse)	I_F =10 A_{DC} I_F =20 A_{DC}	V_{F1} V_{F2}	**0.78** **0.87**	V_{DC}
Instantaneous Forward Voltage Drop (T_A = +125°C, 300-500 μsec Pulse)	I_F =10 A_{DC} I_F =20 A_{DC}	V_{F1} V_{F2}	**0.63** **0.70**	V_{DC}
Reverse Leakage Current (Rated V_R, 300 μsec pulse minimum)	T_A = 25°C T_A = 125°C	I_{R1} I_{R2}	**1.5** **10**	**mA**
Junction Capacitance (V_R = 10 V_{DC}, T_A = 25°C, f = 1 MHz)		C_J	**600**	**pF**

CASE OUTLINE: SED10HB45



CASE OUTLINE: SED10HE45



TYPICAL OPERATING CURVES

(T_A = 25°C unless otherwise specified)