



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

**20 AMP
100 VOLTS
SCHOTTKY RECTIFIER**

Designer's Data Sheet

Part Number / Ordering Information ^{1/}

SED20 _ 100 _

L Screening^{2/} = None
TX = TX Level
TXV = TXV Level
S = S Level

L Configuration

HB = without lead
HE = with lead

- 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/}

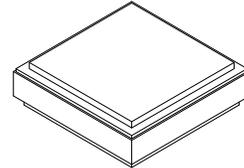
MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage		V_{RRM} V_{RWM} V_R	100	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_A = 100^\circ\text{C}$)		I_O	20	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, Superimposed on I_O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

Notes:

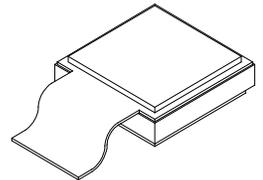
^{1/} For Ordering Information, Price, Operating Curves, and Availability – Contact Factory.

^{2/} Screening to MIL-PRF-19500.

SEDPACK 1



HB Series



HE Series

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

DATA SHEET #: SH0024B

DOC



Solid State Devices, Inc.

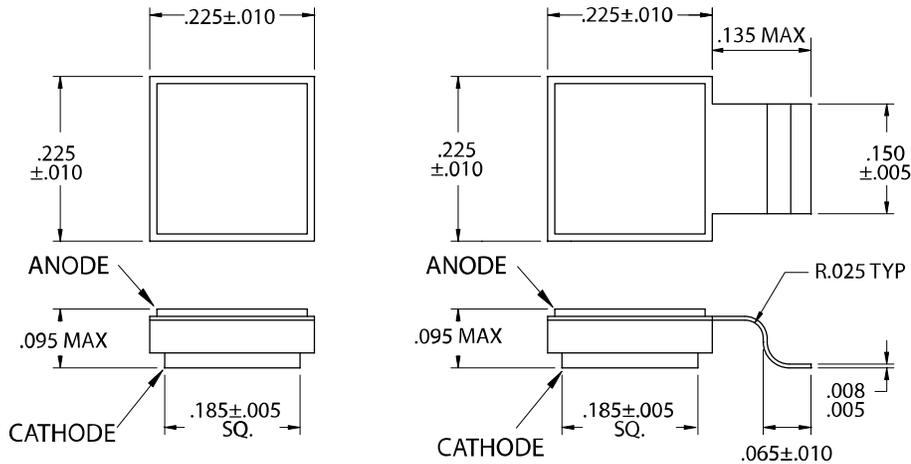
14701 Firestone Blvd. * La Mirada, Ca 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

SED20HB100 SED20HE100

ELECTRICAL CHARACTERISTICS	Symbol	Maximum	Unit	
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, 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 ($T_A = +125^\circ\text{C}$, 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)	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	I_{R1} I_{R2}	1.5 10	mA
Junction Capacitance ($V_R = 10 V_{DC}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$)		C_J	600	pF

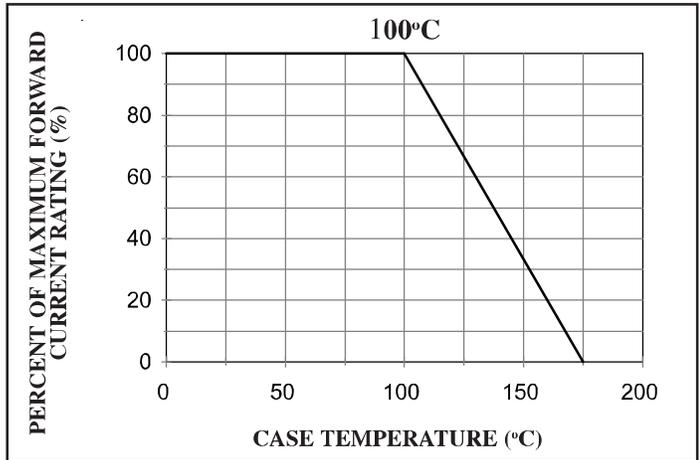
CASE OUTLINE: SED10HB45

CASE OUTLINE: SED10HE45



TYPICAL OPERATING CURVES

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



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

DATA SHEET #: SH0024B

DOC