



# Solid State Devices, Inc.

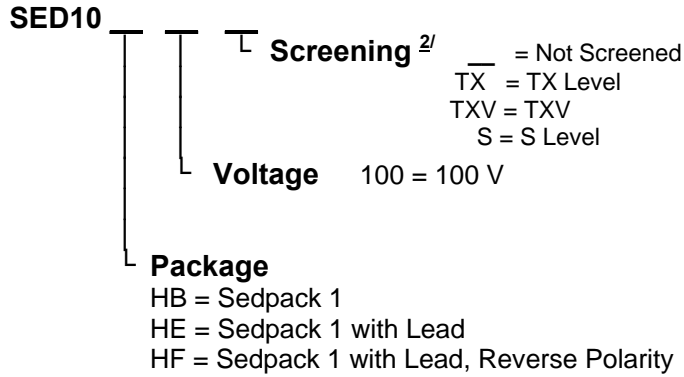
14701 Firestone Blvd \* La Mirada, CA 90638-5223  
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## SED10HB100, SED10HE100 and SED10HF100

### 10 A / 100 V Schottky Rectifier

### Designer's Data Sheet

#### Part Number / Ordering Information <sup>1/</sup>



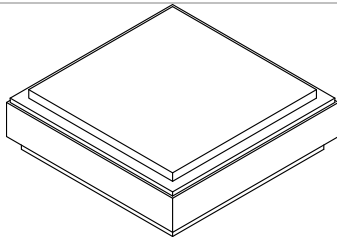
#### FEATURES:

- Low Reverse Leakage
- Low Forward Voltage Drop
- Hermetically Sealed Power Surface Mount Package
- Guard Ring for Overvoltage Protection
- Eutectic Die Attach
- 150°C Operating Temperature
- TX, TXV, and Space Level Screening Available <sup>2/</sup>. Consult Factory.

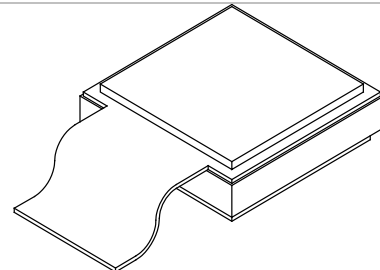
#### MAXIMUM RATINGS <sup>3/</sup>

		Symbol	Value	Units
Peak Repetitive and Peak Reverse Voltage		$V_{RRM}$ $V_R$	100	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, 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 & Storage Temperature		$T_{OP}$ & $T_{stg}$	-55 to +175	$^\circ\text{C}$
Maximum Thermal Resistance (Junction to Case)	SED10HB100 SED10HE100 SED10HF100	$R_{\theta JC}$	1.25 1.25 3.00	$^\circ\text{C/W}$

SEDPACK 1 (HB)



SEDPACK 1 with Lead (HE, HF)



#### NOTES:

<sup>1/</sup> For Ordering Information, Price, Operating Curves, and Availability Contact Factory.

<sup>2/</sup> Screened to MIL-PRF-19500.

<sup>3/</sup> Unless Otherwise Specified, All Electrical Characteristics @25°C.

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

**DATA SHEET #: SH0028C**

**DOC**



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**SED10HB100, SED10HE100  
and  
SED10HF100**

<b>ELECTRICAL CHARACTERISTICS <sup>3/</sup></b>	<b>Symbol</b>	<b>Maximum</b>	<b>Units</b>	
<b>Instantaneous Forward Voltage Drop</b> ( $T_A=25^\circ\text{C}$ , 300 - 500 $\mu\text{sec}$ pulse)	$I_F = 10 A_{DC}$	$V_{F1}$	0.75	$V_{DC}$
<b>Instantaneous Forward Voltage Drop</b> ( $T_A=+125^\circ\text{C}$ , 300 - 500 $\mu\text{sec}$ pulse)	$I_F = 10 A_{DC}$	$V_{F2}$	0.63	$V_{DC}$
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{sec}$ pulse minimum)		$I_{R1}$	1.0	<b>mA</b>
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = +125^\circ\text{C}$ , 300 $\mu\text{sec}$ pulse minimum)		$I_{R2}$	10	<b>mA</b>
<b>Junction Capacitance</b> ( $V_R = 10\text{V}$ , $f = 1\text{MHz}$ , $T_A = 25^\circ\text{C}$ )		$C_J$	600	<b>pF</b>

<b>NOTES:</b> 1/ For Ordering Information, Price, Operating Curves, and Availability Contact Factory. 2/ Screened to MIL-PRF-19500. 3/ Unless Otherwise Specified, All Electrical Characteristics @25°C  <b>Available Part Numbers:</b> SED10HB100, SED10HE100, and SED10HF100	<b>PIN ASSIGNMENT</b>			
	<b>Package</b>	<b>TOP</b>	<b>BOTTOM</b>	<b>LEAD</b>
	<b>Sedpack (HB)</b>	Anode	Cathode	---
	<b>Sedpack with Lead (HE)</b>	Anode	Cathode	Anode
	<b>Sedpack with Lead (HF)</b>	Cathode	Anode	Cathode

