



**Solid State Devices, Inc.**

14701 Firestone Blvd \* La Mirada, CA 90638-5223  
 Phone: (562) 404-4474 \* Fax: (562) 404-1773  
 ssdi@ssdi-power.com \* [www.ssdi-power.com](http://www.ssdi-power.com)

**SED110LB30, SED110LE30,  
and SED110LT30**

**110 A / 30 V  
Schottky Rectifier**

**Designer's Data Sheet**

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

**SED110**

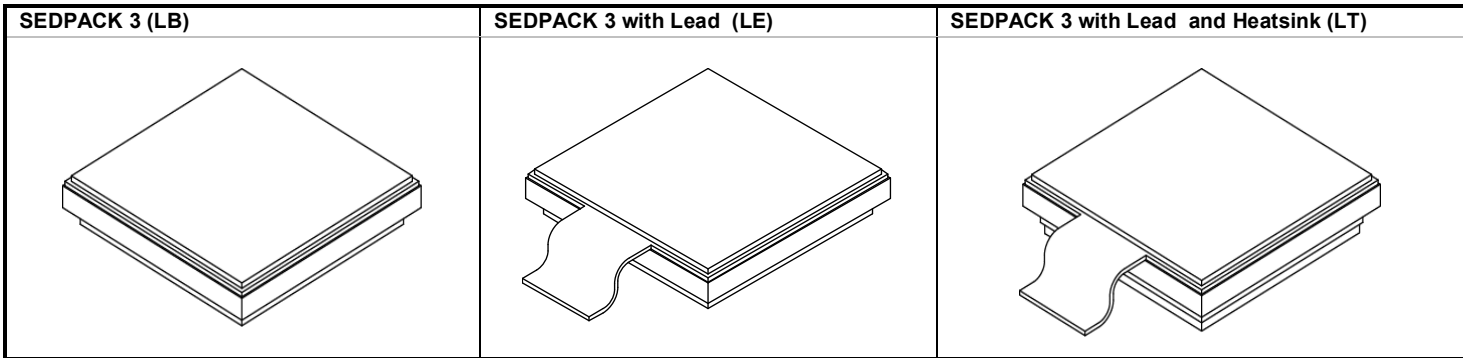
**Screening** <sup>2/</sup>         = Not Screened  
                                  TX = TX Level  
                                  TXV = TXV  
                                  S = S Level

**Voltage**    30 = 30 V

**Package**  
 LB = Sedpack 3  
 LE = Sedpack 3 with Lead  
 LT = Sedpack 3 with Lead and Heatsink

- FEATURES:**
- 30 Volt Schottky Rectifier
  - Average Output Current 110 Amps
  - Low Reverse Leakage
  - Low Forward Voltage Drop
  - Hermetically Sealed Power Surface Mount Package
  - Guard Ring for Overvoltage Protection
  - Eutectic Die Attach
  - TX, TXV, and Space Level Screening Available <sup>2/</sup>. Consult Factory.

<b>MAXIMUM RATINGS</b> <sup>3/</sup>	<b>Symbol</b>	<b>Value</b>	<b>Units</b>
<b>Peak Repetitive Reverse and DC Blocking Voltage</b>	$V_{RRM}$ $V_{RWM}$ $V_R$	30	Volts
<b>Average Rectified Forward Current</b> (Resistive Load, 60 Hz, Sine Wave, $T_C = 100^\circ\text{C}$ )	$I_O$	110	Amps
<b>Peak Surge Current</b> (8.3 ms pulse, half sine wave superimposed on $I_O$ , allow Junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$ )	$I_{FSM}$	1000	Amps
<b>Operating &amp; Storage Temperature</b>	$T_{OP}$ & $T_{stg}$	-55 to +150	$^\circ\text{C}$
<b>Maximum Thermal Resistance</b> (Junction to Case)	$R_{\theta JC}$	0.3	$^\circ\text{C/W}$



**NOTES:**  
<sup>1/</sup> For Ordering Information, Price, and Availability Contact Factory.  
<sup>2/</sup> Screened to MIL-PRF-19500.  
<sup>3/</sup> Unless Otherwise Specified, All Electrical Characteristics @25°C.



**Solid State Devices, Inc.**

14701 Firestone Blvd \* La Mirada, CA 90638-5223  
 Phone: (562) 404-4474 \* Fax: (562) 404-1773  
 ssdi@ssdi-power.com \* [www.ssdi-power.com](http://www.ssdi-power.com)

**SED110LB30, SED110LE30,  
and SED110LT30**

<b>ELECTRICAL CHARACTERISTICS <sup>3/</sup></b>	<b>Symbol</b>	<b>Maximum Value</b>	<b>Units</b>
<b>Instantaneous Forward Voltage Drop</b> (T <sub>A</sub> =25°C, 300-500 μsec pulse)	I <sub>F</sub> = 25 A	V <sub>F1</sub>	0.42
	I <sub>F</sub> = 50 A	V <sub>F2</sub>	0.46
	I <sub>F</sub> = 110 A	V <sub>F3</sub>	0.55
<b>Instantaneous Forward Voltage Drop</b> (300-500 μsec pulse)	T <sub>A</sub> = 125°C, I <sub>F</sub> = 110 A	V <sub>F4</sub>	0.52
<b>Reverse Leakage Current</b> (Rated V <sub>R</sub> , T <sub>A</sub> = 25°C, 300 μsec pulse minimum)		I <sub>R1</sub>	7.5
<b>Reverse Leakage Current</b> (Rated V <sub>R</sub> , T <sub>A</sub> = 125°C, 300 μsec pulse minimum)		I <sub>R2</sub>	750
<b>Junction Capacitance</b> (V <sub>R</sub> = 5V, f = 1MHz, T <sub>A</sub> = 25°C)		C <sub>J</sub>	7000

<b>NOTES:</b> 1/ For Ordering Information, Price, and Availability Contact Factory. 2/ Screened to MIL-PRF-19500. 3/ Unless Otherwise Specified, All Electrical Characteristics @25°C.	<b>PIN ASSIGNMENT</b>			
	<b>Package</b>	<b>TOP</b>	<b>BOTTOM</b>	<b>LEAD</b>
	<b>Sedpack 3 (LB)</b>	Anode	Cathode	---
	<b>Sedpack 3 with Lead (LE)</b>	Anode	Cathode	Anode
	<b>Sedpack 3 with Lead (LT)</b>	Anode	Cathode	Anode

