



PRELIMINARY

SOLID STATE DEVICES, INC.

14005 Stage Road * Santa Fe Springs, Ca 90670
Phone: (562) 404-4474 * Fax: (562) 404-1773

**SED110LB30
SED110LE30**

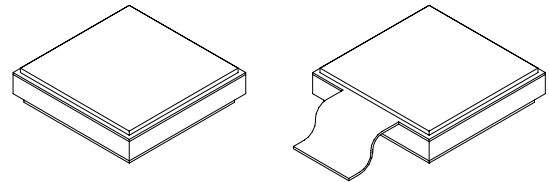
**110 AMP
30 VOLTS
SCHOTTKY
RECTIFIER**

Designer's Data Sheet

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

SEDPACK 3



| Maximum Ratings | SYMBOL | VALUE | UNITS |
|--|---------------------------------|-------------|--------------------|
| Peak Repetitive Reverse and DC Blocking Voltage | V_{RRM} V_{RWM} V_R | 30 | Volts |
| Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, $T_C = 100\text{ }^\circ\text{C}$) | I_o | 110 | Amps |
| Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on I_o , allow junction to reach equilibrium between pulses, $T_A = 25\text{ }^\circ\text{C}$) | I_{FSM} | 1000 | Amps |
| Operating and Storage Temperature | Top & Tstg | -55 TO +175 | $^\circ\text{C}$ |
| Maximum Thermal Resistance Junction to Case | $R_{\theta JC}$ | 0.3 | $^\circ\text{C/W}$ |

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

DATA SHEET #: SH0015A

SED110LB30 SED110LE30

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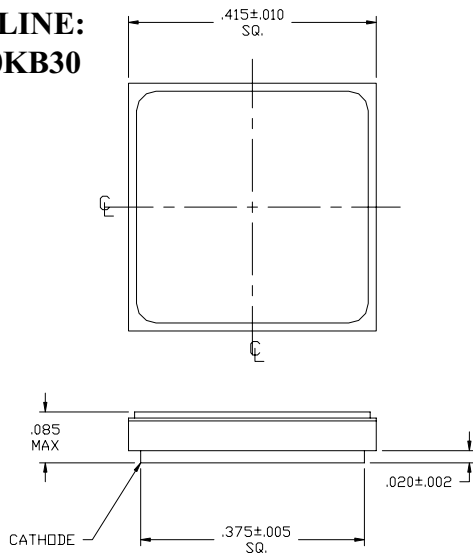


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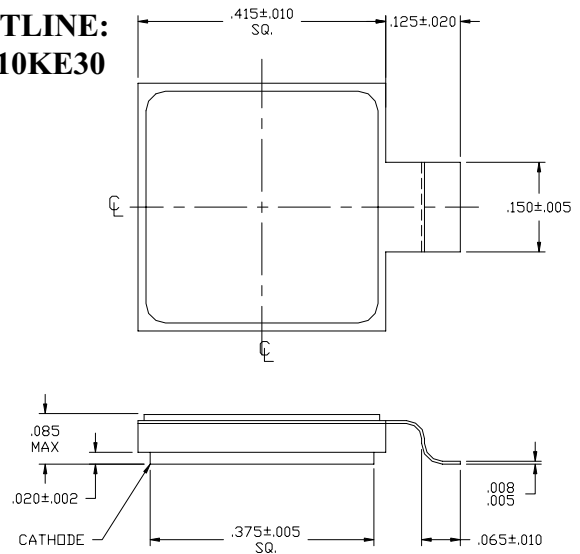
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| Electrical Characteristics | SYMBOL | VALUE | UNITS |
|--|----------------------------------|---|----------|
| Instantaneous Forward Voltage Drop ($I_F = 25A_{DC}$, $T_A = 25^\circ C$, 300 μs Pulse) ($I_F = 50A_{DC}$, $T_A = 25^\circ C$, 300 μs Pulse) ($I_F = 110A_{DC}$, $T_A = 25^\circ C$, 300 μs Pulse) | V_{F1} V_{F2} V_{F3} | 0.40 0.46 0.55 | V_{DC} |
| Instantaneous Forward Voltage Drop ($I_F = 110A_{DC}$, $T_A = 125^\circ C$, 300 μs Pulse) | V_{F4} | 0.52 | V_{DC} |
| Reverse Leakage Current Rated V_R , $T_A = 25^\circ C$, 300 μs pulse minimum | I_{R1} | 7.5 | mA |
| Reverse Leakage Current Rated V_R , $T_A = 125^\circ C$, 300 μs pulse minimum | I_{R2} | 500 | mA |
| Junction Capacitance ($V_R = 5V_{DC}$, $T_A = 25^\circ C$, $f = 1MHz$) | C_J | 7500 | pF |

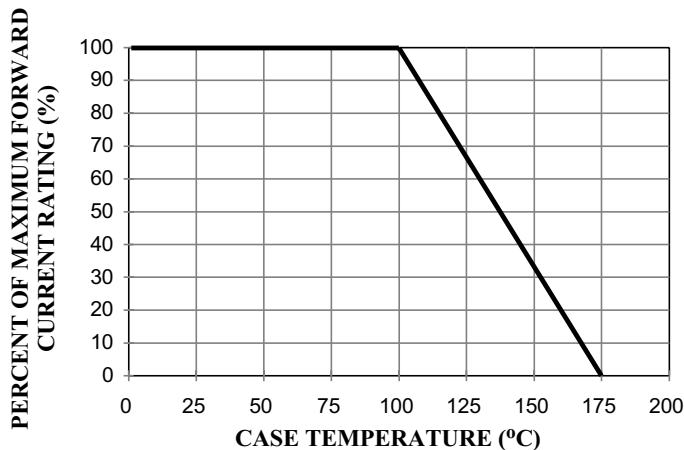
**CASE OUTLINE:
P/N SED110KB30**



**CASE OUTLINE:
P/N SED110KE30**



POWER DERATING CURVE



FORWARD VOLTAGE @ $T_A = 25^\circ C$

