



Solid State Devices, Inc.

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**SED150LB30, SED150LE30,
and SED150LT30**

Designer's Data Sheet

Part Number / Ordering Information ^{1/}

SED150

Screening ^{2/}

- = Not Screened
- TX = TX Level
- TXV = TXV Level
- S = S Level

Voltage 30 = 30 V

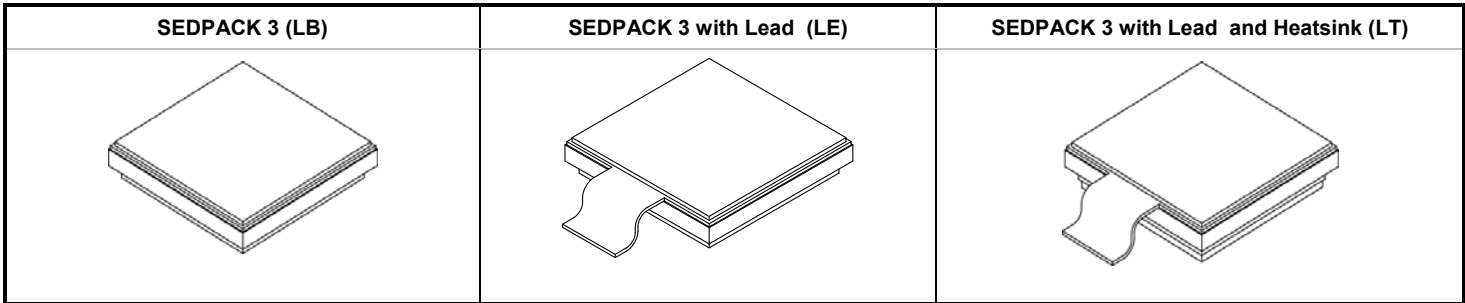
Package

- LB = Sedpack 3
- LE = Sedpack 3 with Lead
- LT = Sedpack 3 with Lead and Heatsink

**150 Amp / 30 Volts
Schottky Rectifier**

- FEATURES:**
- 30 Volt Schottky Rectifier
 - Average Output Current 150 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 ^{2/}. Consult Factory.

MAXIMUM RATINGS ^{3/}	Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_C = 100^\circ\text{C}$)	I_O	150	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}	1000	Amps
Operating & Storage Temperature	T_{OP} & T_{stg}	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance (Junction to Case)	$R_{\theta JC}$	0.3	$^\circ\text{C/W}$



NOTES:

1/ For ordering information, price, and availability - Contact factory.

2/ Screening based on MIL-PRF-19500. Screening flows available on request.

3/ Unless otherwise specified, all electrical characteristics @25°C.



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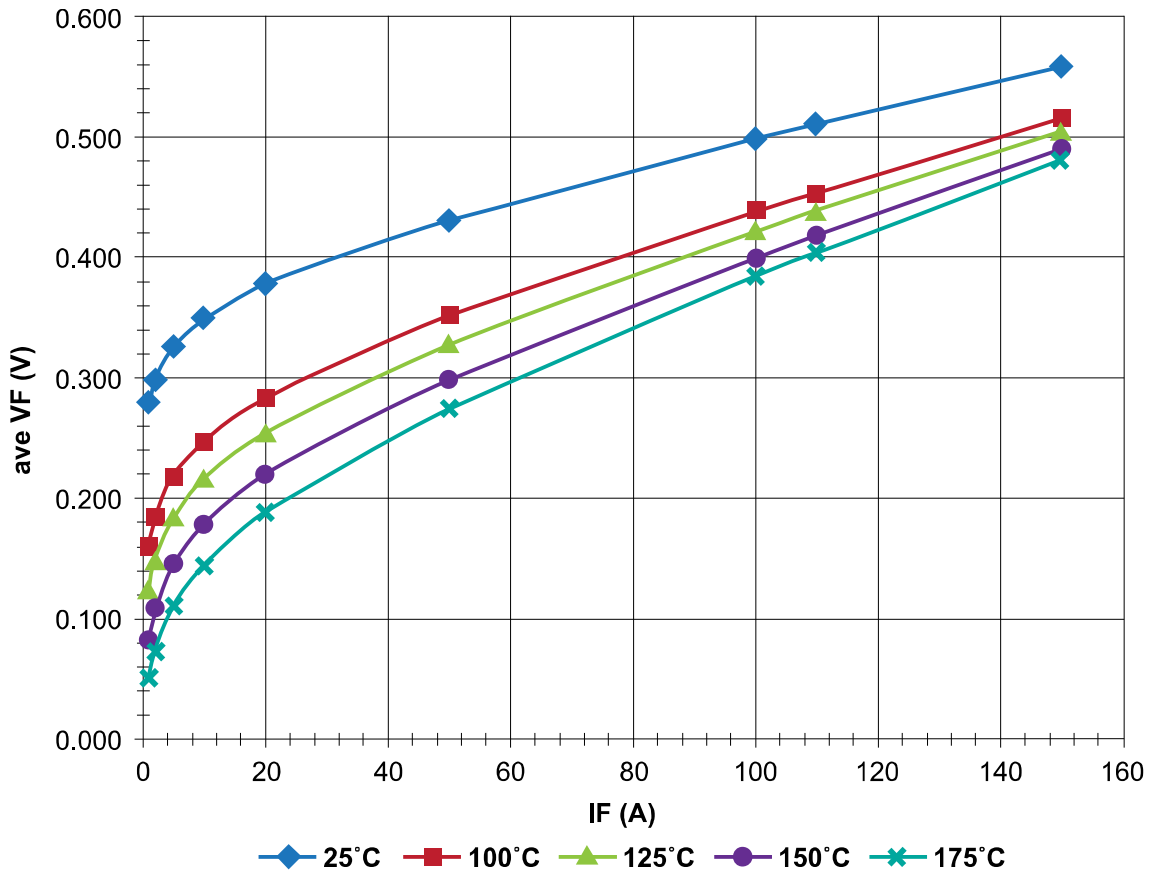
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ELECTRICAL CHARACTERISTICS ^{3/}		Symbol	Maximum Value	Units
Instantaneous Forward Voltage Drop ($T_A=25^\circ\text{C}$, 300-500 μsec pulse)	$I_F = 50 \text{ A}$	V_{F1}	0.46	V_{DC}
	$I_F = 110 \text{ A}$	V_{F2}	0.55	
	$I_F = 150 \text{ A}$	V_{F3}	0.65	
Instantaneous Forward Voltage Drop (300-500 μsec pulse)	$T_A = 125^\circ\text{C}$, $I_F = 150 \text{ A}$	V_{F4}	0.60	V_{DC}
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μsec pulse minimum)		I_{R1}	7.5	mA
Reverse Leakage Current (Rated V_R , $T_A = 125^\circ\text{C}$, 300 μsec pulse minimum)		I_{R2}	750	mA
Junction Capacitance ($V_R = 5\text{V}$, $f = 1\text{MHz}$, $T_A = 25^\circ\text{C}$)		C_J	7000	pF

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

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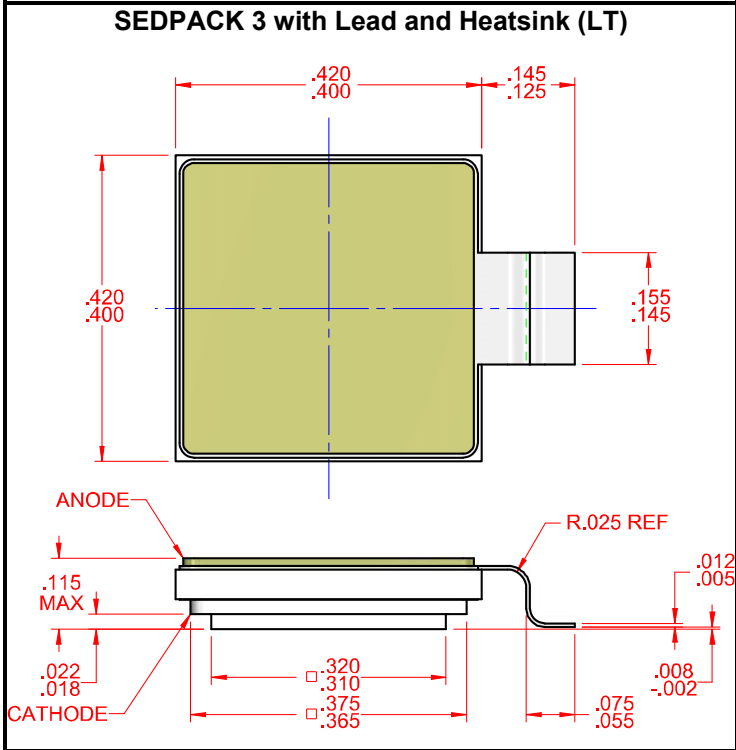
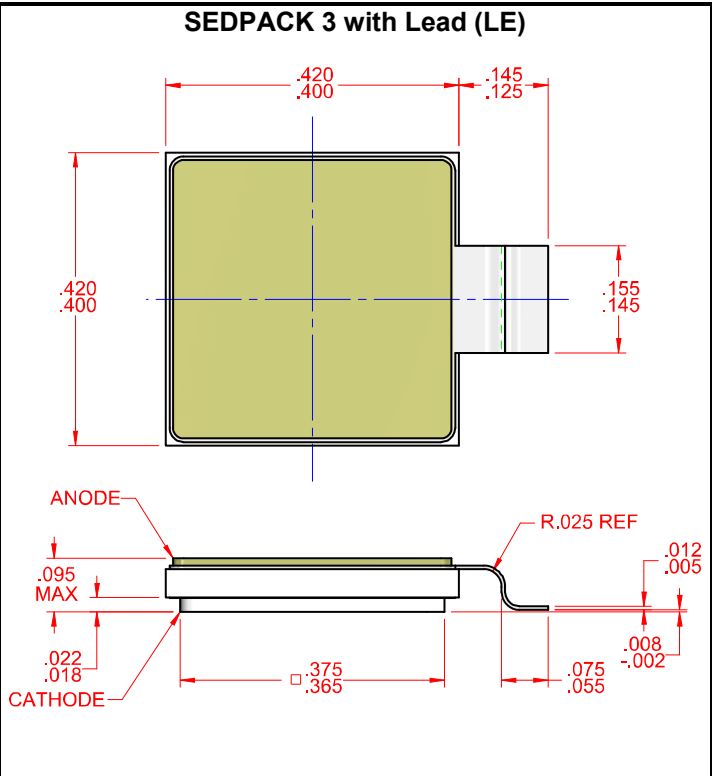
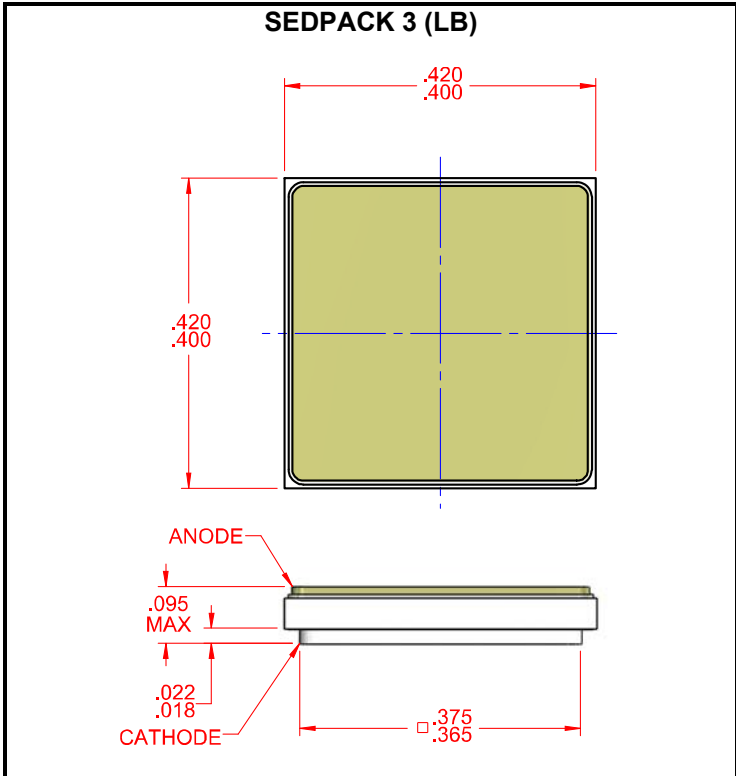
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PIN ASSIGNMENT			
Package	TOP	BOTTOM	LEAD
Sedpack 3 (LB)	Anode	Cathode	---
Sedpack 3 with Lead (LE)	Anode	Cathode	Anode
Sedpack 3 with Lead and Heatsink(LT)	Anode	Cathode	Anode

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