



PRELIMINARY

SOLID STATE DEVICES, INC.

SED75KB30
SED75KE30

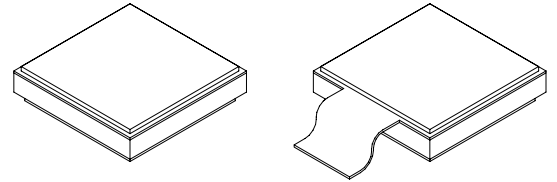
Designer's Data Sheet

75 AMP
30 VOLTS
SCHOTTKY
RECTIFIER

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 2



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, $T_C = 100^\circ\text{C}$)	I_o	75	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}	600	Amps
Operating and Storage Temperature	Top & Tstg	-55 TO +175	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	0.8	$^\circ\text{C/W}$

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

DATA SHEET #: SH0019B

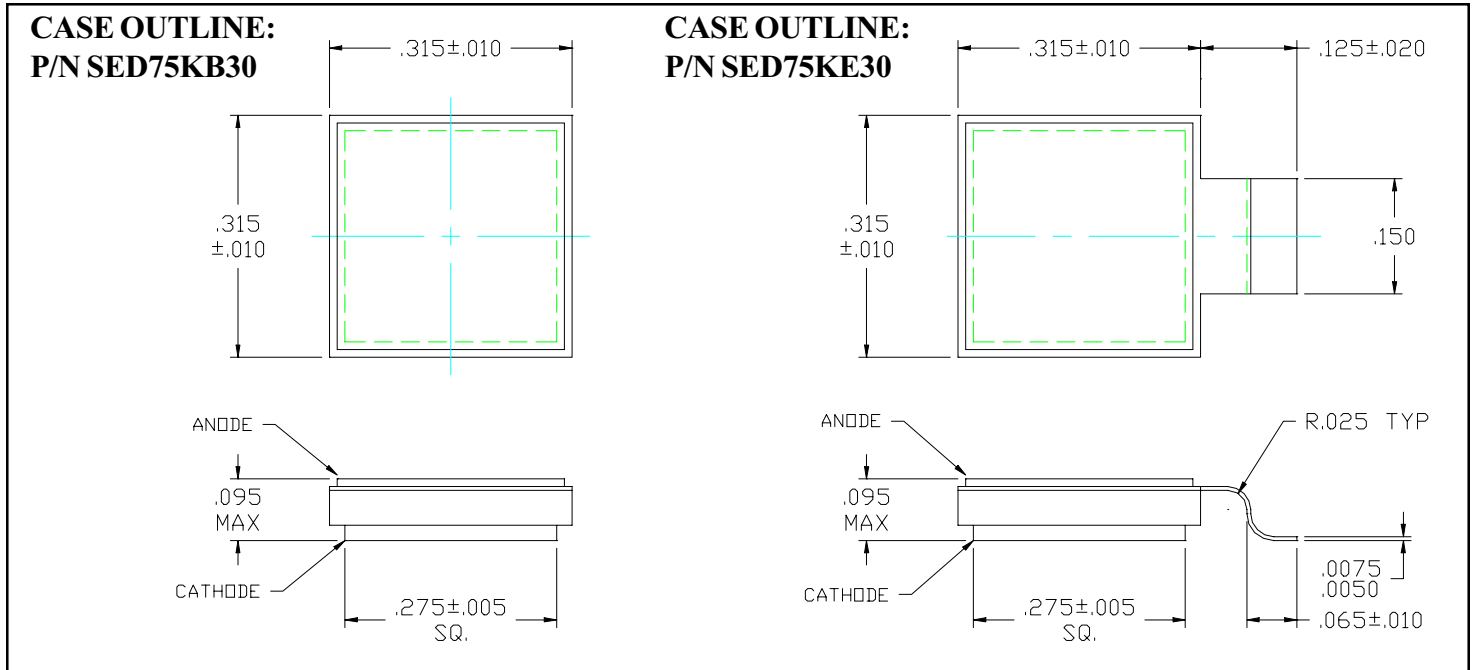
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Electrical Characteristics		SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, 300 μs Pulse)	$I_F = 50A_{DC}$	V_{F1}	0.52	V_{DC}
	$I_F = 75A_{DC}$	V_{F2}	0.60	
Instantaneous Forward Voltage Drop ($I_F = 50A_{DC}$, $T_A = +125^\circ\text{C}$, 300 μs Pulse)		V_{F3}	0.45	V_{DC}
Reverse Leakage Current (Rated V_R , 300 μsec pulse minimum)	$T_A = 25^\circ\text{C}$	I_{R1}	2	mA
	$T_A = 125^\circ\text{C}$	I_{R2}	450	
Junction Capacitance ($V_R = 5V_{DC}$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)		C_J	4600	pF



TYPICAL OPERATING CURVES

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

