



Solid State Devices, Inc.

14701 Firestone Blvd. * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
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SED75KB30 SED75KE30

**75 AMP
30 VOLT
SCHOTTKY RECTIFIER**

Designer's Data Sheet

Part Number / Ordering Information ^{1/}

SED75 **30**

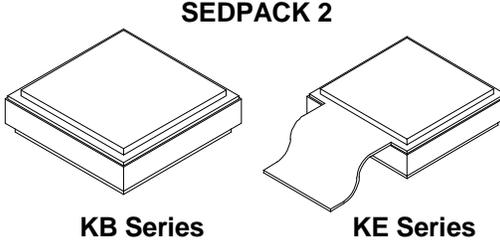
 L **Screening**^{2/} = None
 TX = TX Level
 TXV = TXV Level
 S = S Level

 L **Configuration**
 KB = without lead
 KE = with lead

- FEATURES:**
- Low Reverse Leakage
 - Low Forward Voltage Drop
 - Hermetically Sealed Power Surface Mount Package
 - Guard Ring for Overvoltage Protection
 - TX, TXV, and Space Level Screening Available^{2/}

MAXIMUM RATINGS	Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_A = 100^\circ\text{C}$)	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	T_{OP} & T_{stg}	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	0.7	$^\circ\text{C/W}$

Notes:
 1/ For Ordering Information, Price, Operating Curves, and Availability – Contact Factory.
 2/ Screening to MIL-PRF-19500.





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ELECTRICAL CHARACTERISTICS		Symbol	Maximum	Unit
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, 300 μsec Pulse)	$I_F = 50 A_{DC}$	V_{F1}	0.52	V_{DC}
	$I_F = 75 A_{DC}$	V_{F2}	0.60	
Instantaneous Forward Voltage Drop ($I_F = 50 A_{DC}$, $T_A = +125^\circ\text{C}$, 300 μsec 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 ($V_R = 5 V_{DC}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$)		C_J	4600	pF

