PRELIMINARY

SOLID STATE DEVICES, INC.
14830 Valley View Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773

SED30KE600
SED30KW600

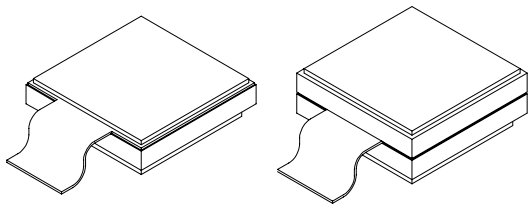
Designer's Data Sheet

30 AMP
600 VOLTS
HYPER FAST
RECTIFIER

FEATURES:

- **Low Forward Voltage Drop**
- **Low Reverse Leakage**
- **Surface Mountable Package**
- **Guard Ring for Overvoltage Protection and Ruggedness**
- **150°C Operating Temperature**
- **Hermetically Sealed Package**
- **Eutectic Die Attach**
- **Hyper Fast Soft Recovery**
- **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	600	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, T_C = 100 °C	Io	30	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on Io, allow junction to reach equilibrium between pulses, T_C = 100°C)	I_{FSM}	300	Amps
Operating and Storage Temperature	Top & Tstg	-55 TO +150	°C
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	0.9	°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 #: RC0044A

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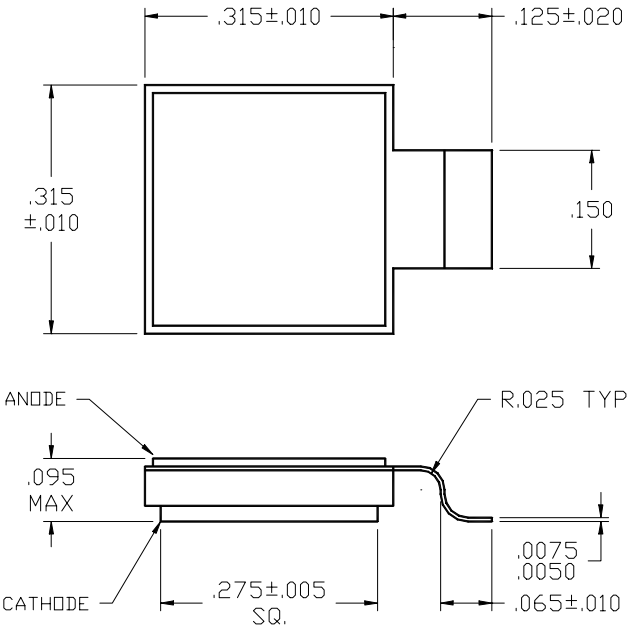
Electrical Characteristics		SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop (T_A = 25 °C, 300µs Pulse)	$I_F = 20A_{DC}$ $I_F = 30A_{DC}$	V_{F1} V_{F2}	**1.15** **1.30**	V_{DC}
Minimum Reverse Blocking Voltage (I_R = 100µA, 300µsec pulse minimum)		BV_R	**600**	V_{DC}
Reverse Leakage Current (V_R = 480V, 300µsec pulse minimum)	T_A = 25 °C T_A = 125 °C	I_{R1} I_{R2}	**0.50** **5**	µA mA
Junction Capacitance ($V_R = 5V_{DC}$, T_A = 25°C, f = 1MHz)		C_J	**5000**	pF
Reverse Recovery Time (I_F = 500mA, I_R = 1A, I_{RR} = 250mA, T_A = 25°C)		t_{RR}	**35**	nsec

CASE OUTLINE:
P/N SED30KE600



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P/N SED30KW600