



PRELIMINARY

SOLID STATE DEVICES, INC.

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

**SED100KB40,KE40
thru
SED200KB40,KE40**

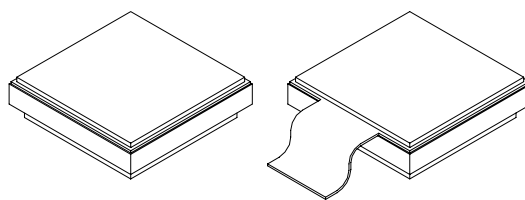
Designer's Data Sheet

**40 AMP
100 - 500 VOLTS
HYPER FAST
RECTIFIER**

FEATURES:

- Low Forward Voltage Drop
- Low Reverse Leakage
- Surface Mountable Package
- Guard Ring for Overvoltage Protection and Ruggedness
- 175°C Operating Temperature
- Hermetically Sealed Package
- Eutectic Die Attach
- TX, TXV and Space Level Screening Available

SEDPACK 2



Maximum Ratings		SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage xx - Package Code (See Page 2)	SED100xx40 SED150xx40 SED200xx40	V_{RRM} V_{RWM} V_R	100 150 200	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, $T_A = 125^\circ\text{C}$)		I_o	40	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on I_o , allow junction to reach equilibrium between pulses, $T_J = 25^\circ\text{C}$)		I_{FSM}	500	Amps
Operating and Storage Temperature		Top & Tstg	-55 TO +175	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case		$R_{\theta JC}$	0.85	$^\circ\text{C/W}$

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

DATA SHEET #: RC0033A

**SED100KB40,KE40
thru
SED200KB40,KE40**

PRELIMINARY



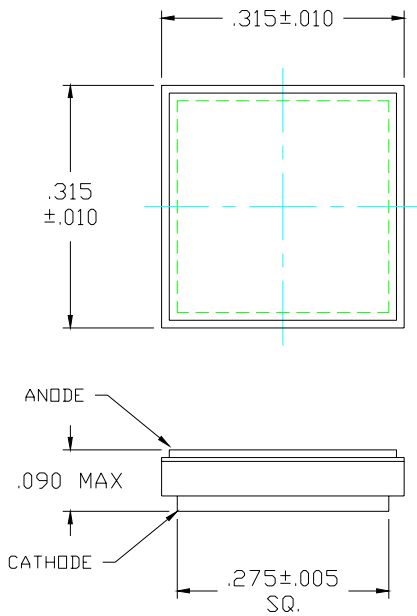
SOLID STATE DEVICES, INC.

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

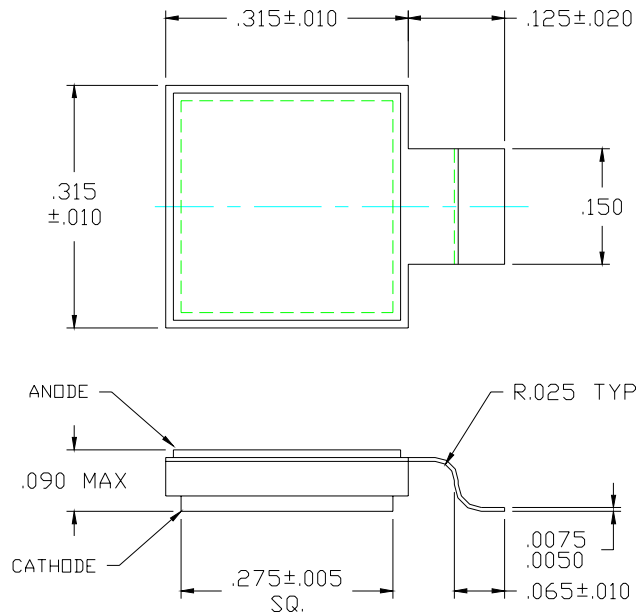
Electrical Characteristics		SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop ($I_F = 40A_{DC}$, 300 μ s Pulse)	$T_A = 25^\circ C$	V_{F1}	1.10	V_{DC}
	$T_A = 125^\circ C$	V_{F2}	0.90	
Reverse Leakage Current (@ Rated V_R , 300 μ sec pulse minimum)	$T_A = 25^\circ C$	I_{R1}	0.15	mA
	$T_A = 125^\circ C$	I_{R2}	10	
Junction Capacitance ($V_R = 10V_{DC}$, $T_A = 25^\circ C$, $f = 1MHz$)		C_J	350	pF
Reverse Recovery Time ($I_F = 500mA$, $I_R = 1A$, $I_{RR} = 250mA$, $T_A = 25^\circ C$)		t_{RR}	40	nsec

CASE OUTLINE: (xx - Voltage Code, See Page 1)

P/N SEDxxKB40



P/N SEDxxKE40



POWER DERATING CURVE

