



**Solid State Devices, Inc.**

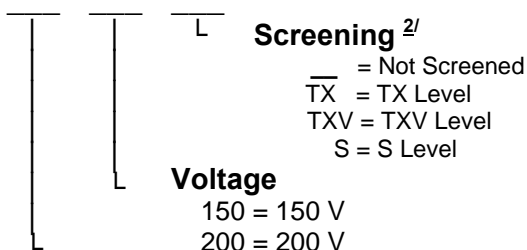
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 ssdi@ssdi-power.com \* www.ssdi-power.com

**SED40KB200 and  
 SSR40G200 SERIES**

**Designer's Data Sheet**

**Part Number / Ordering Information<sup>1/</sup>**

SED40  
 SSR40



**Package**  
 KB = Sedpack 2  
 KE = Sedpack 2 with Lead  
 KF = Sedpack 2 with Lead,  
 Reverse Polarity  
 G = Cerpack

**40 AMPS  
 200 VOLTS  
 POWER SCHOTTKY DIODE**

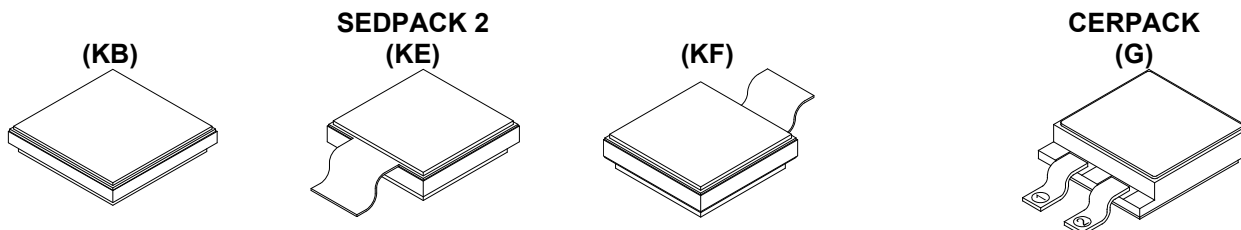
**FEATURES:**

- Low Reverse Leakage
- Low Forward Voltage Drop
- Hermetically Sealed Surface Mount Package
- Guard Ring for Overvoltage Protection
- Eutectic Die Attach
- TX, TXV, and Space Level Screening Available. Contact Factory.

MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	SED40__150, SSR40G150 SED40__200, SSR40G200	$V_{RRM}$ $V_{RWM}$ $V_R$	150 200	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_A = 100^\circ\text{C}$ )		$I_O$	40	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$ )		$I_{FSM}$	500	Amps
Operating and Storage Temperature		$T_{OP}$ & $T_{STG}$	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	KE, KB, G KF	$R_{\theta JC}$	1.5 3.5	$^\circ\text{C/W}$

**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.



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

**DATA SHEET #: SH0064B**

**DOC**



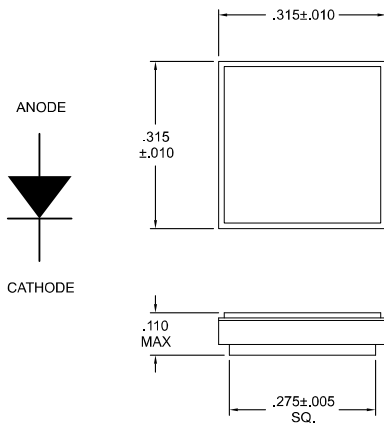
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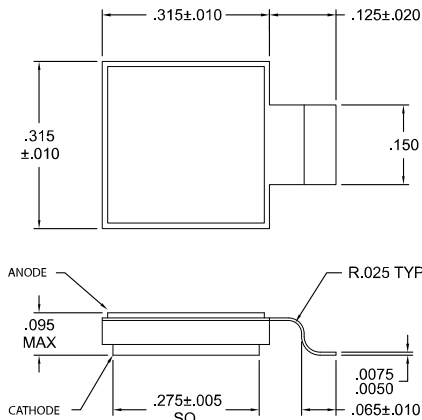
# SED40KB200 and SSR40G200 SERIES

ELECTRICAL CHARACTERISTICS		Symbol	-55	25	100	125	150	Unit
Instantaneous Forward Voltage Drop ( $I_F = 5$ Amps, 300 $\mu$ sec Pulse)	typical	$V_F$	750	670	560	520	480	mVolts
	maximum		-	<b>750</b>	-	<b>600</b>	-	
Instantaneous Forward Voltage Drop ( $I_F = 15$ Amps, 300 $\mu$ sec Pulse)	typical	$V_F$	970	765	655	615	580	mVolts
	maximum		-	<b>840</b>	-	<b>700</b>	-	
Instantaneous Forward Voltage Drop ( $I_F = 30$ Amps, 300 $\mu$ sec Pulse)	typical	$V_F$	1280	830	725	690	655	mVolts
	maximum		-	<b>900</b>	-	<b>750</b>	-	
Instantaneous Forward Voltage Drop ( $I_F = 40$ Amps, 300 $\mu$ sec Pulse)	typical	$V_F$	1470	865	760	725	695	mVolts
	maximum		-	<b>950</b>	-	<b>810</b>	-	
Reverse Leakage Current (Rated $V_R$ , 300 $\mu$ sec pulse minimum)	typical	$I_R$	0.0001	0.0002	0.1	0.6	2.5	mA
	maximum		-	<b>0.01</b>	-	<b>10</b>	-	
Junction Capacitance ( $V_R = 10 V_{DC}$ , $T_A = 25^\circ C$ , $f = 1$ MHz)	typical	$C_J$	-	400	-	-	-	pF
	maximum		-	<b>500</b>	-	-	-	

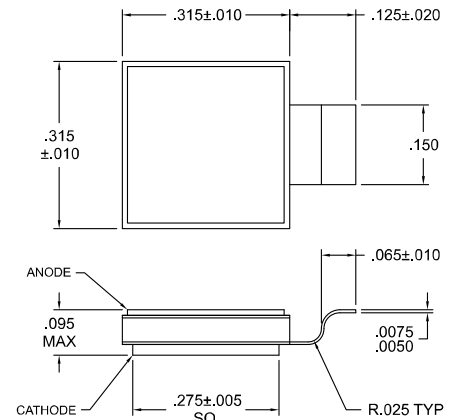
CASE OUTLINE: SED40KB200



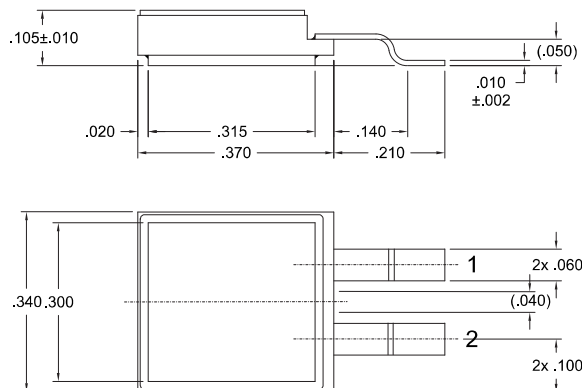
CASE OUTLINE: SED40KE200



CASE OUTLINE: SED40KF200



CASE OUTLINE: SSR40G200



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