



SOLID STATE DEVICES, INC.

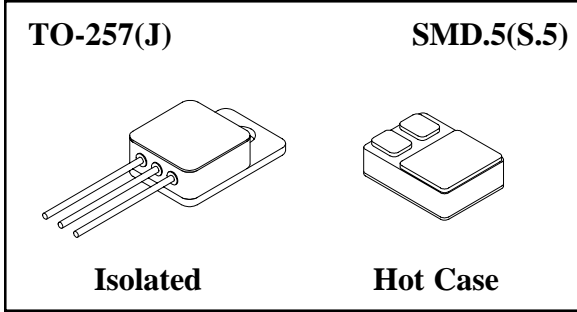
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SDR1510JUF & S.5UF
SDR1512JUF & S.5UF

Designer's Data Sheet

15 AMPS
1000 - 1200 VOLTS
75 nsec
ULTRA FAST
RECTIFIER

- FEATURES:**
- Ultra Fast Recovery: 75nsec Maximum
 - High Surge Rating
 - Low Reverse Leakage Current
 - Low Junction Capacitance
 - Hermetically Sealed Package
 - Custom Lead Forming Available
 - Eutectic Die Attach
 - TX, TXV and Space Level Screening Available



Available in Following Configurations:
 Rectifier: **SDR1510JUF, SDR1510JUFDB, SDR1510JUFUB, and SDR1510S.5UF**
 SDR1512JUF, SDR1512JUFDB, SDR1512JUFUB, and SDR1512S.5UF

Maximum Ratings		SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	SDR1510 SDR1512	V_{RRM} V_{RWM} V_R	1000 1200	Volts
Average Rectified Forward Current. (Resistive load, 60Hz, Sine Wave, $T_A = 25^\circ\text{C}$)		I_o	15	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$)		I_{FSM}	150	Amps
Operating and Storage Temperature		$T_{OP} \& T_{stg}$	-65 TO +175	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	TO-257 (J) SMD.5 (S.5)	$R_{\theta JC}$	1.4 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 #: RC0065A

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SDR1512JUF & S.5UF

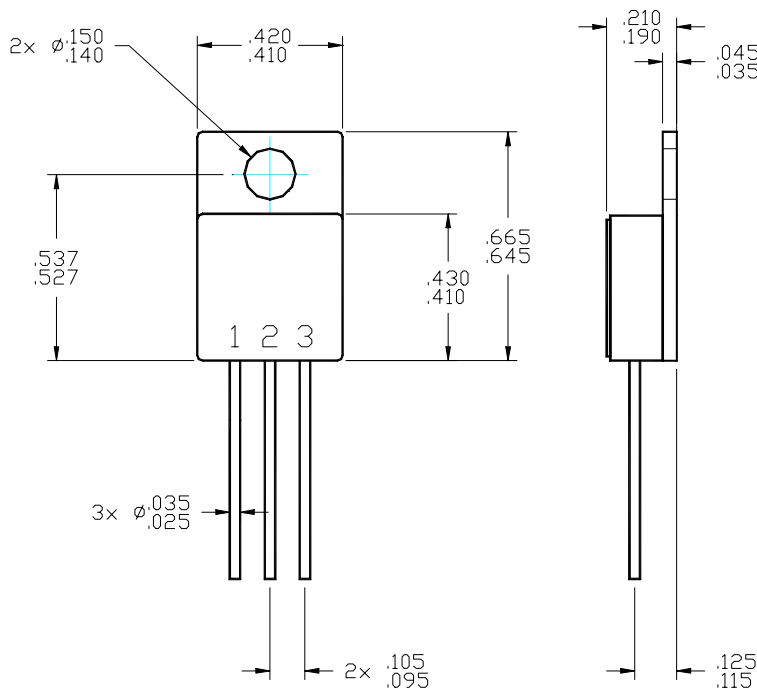


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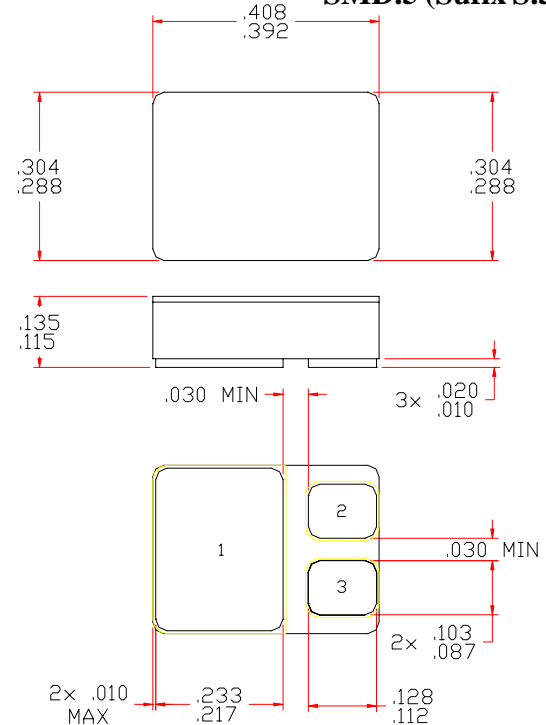
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Electrical Characteristics	SYMBOL	MINIMUM	MAXIMUM	UNITS
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, 300 μsec Pulse)	$I_F = 10\text{ A}$ V_{F1}	--	1.50	V_{DC}
	$I_F = 15\text{ A}$ V_{F2}	--	1.60	
Instantaneous Forward Voltage Drop ($I_F = 10\text{ A}$, 300 μsec pulse)	$T_A = 100^\circ\text{C}$ V_{F3}	--	1.40	V_{DC}
	$T_A = -55^\circ\text{C}$ V_{F4}	--	1.60	
Reverse Leakage Current (80% of Rated V_R , 300 μs pulse min.)	$T_A = 25^\circ\text{C}$ I_{R1}	--	50	μA
	$T_C = 100^\circ\text{C}$ I_{R2}	--	750	μA
Junction Capacitance ($V_R = 10V_{DC}$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)	C_J	--	70	pF
Reverse Recovery Time ($I_F = 500\text{mA}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{mA}$, $T_A = 25^\circ\text{C}$)	t_{RR}	--	75	nsec

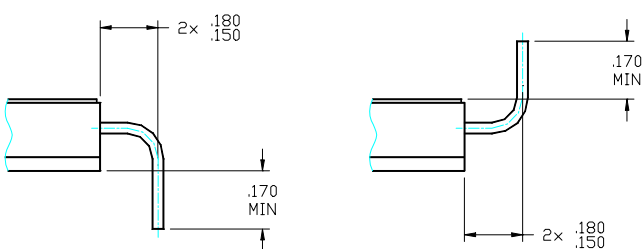
CASE OUTLINE: TO-257 (Suffix J)



SMD.5 (Suffix S.5)



OPTIONAL LEAD BEND CONFIGURATION



SUFFIX JDB

SUFFIX JUB

PIN ASSIGNMENT

CODE	FUNCTION	PIN 1	PIN 2	PIN 3
J	Rectifier	Cathode	Anode	Anode
S.5	Rectifier	Cathode	Anode	Anode