



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, CA 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

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SDR966CTN & SDR966CTP thru SDR969CTN & SDR969CTP

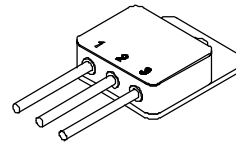
DESIGNER'S DATA SHEET

Features:

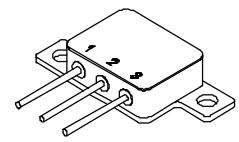
- Soft Recovery Diode
- Ultra Fast Recovery: 80 nsec Maximum
- Faster Recovery Versions Available
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed Package
- Gold Eutectic Die Attach Available
- Ultrasonic Aluminum Wire Bond
- Ceramic Seals for Improved Hermeticity Available
- Common Anode and Doubler Versions Available
- TX, TXV, Space Level Screening Available. Consult Factory.

60 AMP
600 - 900 Volts
80 nsec
Ultra Fast Recovery
Centertap Rectifier

TO-258 (N)



TO-259 (P)



Maximum Ratings	Symbol	Value	Units	
Peak Repetitive Reverse and DC Blocking Voltage	SDR966CTN & SDR966CTP SDR967CTN & SDR967CTP SDR968CTN & SDR968CTP SDR969CTN & SDR969CTP	V_{RRM}	600	Volts
		V_{RWM}	700	
		V_R	800	
			900	
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ\text{C}$) ^{1/}	I_o	60	Amps	
Peak Surge Current (Per Leg) (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}	500*	Amps	
Operating & Storage Temperature	Top & Tstg	-65 to +200	°C	
Maximum Thermal Resistance Junction to Case, Each Individual Diode Junction to Case ^{1/}	R_{qJE}	1.3	°C/W	
		0.7		

Notes:

^{1/} Both Legs Tied Together

* Available with Higher Surge Rating

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

DATA SHEET #: RU0077B

DOC



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**SDR966CTN & SDR966CTP
thru
SDR969CTN & SDR969CTP**

Electrical Characteristics (Per Leg)		Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, 300 μs Pulse)	$I_F = 15\text{A}$	V_{F1}	—	1.20	Volts
	$I_F = 30\text{A}$	V_{F2}	—	1.35	
Instantaneous Forward Voltage Drop ($I_F = 15\text{A}$, 300 μs Pulse)	$T_A = 100^\circ\text{C}$	V_{F3}	—	1.10	Volts
	$T_A = -55^\circ\text{C}$	V_{F4}	—	1.30	
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs Pulse minimum)		I_{R1}	—	100	mA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs Pulse minimum)		I_{R2}	—	10	mA
Junction Capacitance ($V_R = 10\text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)		C_J	—	100	pF
Reverse Recovery Time ($I_F = 500\text{ mA}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$)	$T_A = 25^\circ\text{C}$	t_{rr}	—	80	nsec

