



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638
 Phone: (562) 404-7855 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

**SDR620CT
Series**

**40A 35nsec
100 to 200 V
Hyper Fast Centertap Rectifier**

DESIGNER'S DATA SHEET

Part Number / Ordering Information ^{1/}

SDR62 0 S1 TX


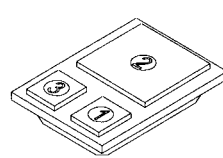
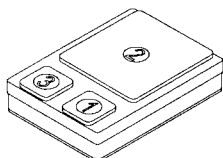
Screening ^{2/} = Not Screened
 TX = TX Level
 TXV = TXV Level
 S = S Level

Package: ^{3/} = LCC3
 S1 = SMD1
 E = Milpack 1

Voltage: 0 = 200V
 1 = 150 V
 2 = 200 V

- Features:**
- Hyper Fast Recovery: 35nsec Maximum
 - High Surge Rating
 - Low Reverse Leakage Current
 - Low Junction Capacitance
 - Hermetically Sealed Package
 - Eutectic Die Attach
 - TX, TXV and S Level Screening Available
 - Higher voltages available

Maximum Ratings		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	SDR620CT	V_{RRM}	100	Volts
	SDR621CT	V_{RSM}	150	
	SDR622CT	V_R	200	
Average Rectified Forward Current (Resistive Load, 60 hz Sine Wave, $T_A = 25^\circ C$)	Total	I_O	40	Amps
	Per Leg		20	
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ C$)	Total ^{4/}	I_{FSM}	600	Amps
	Per Leg		300	
Operating & Storage Temperature		T_{OP} & T_{STG}	-65 to +200	$^\circ C$
Maximum Total Thermal Resistance Junction to Case	LCC3	$R_{\theta JC}$	1.4	$^\circ C/W$
	SMD 1 & Milpack		0.6	

<p>LCC3()</p>  <p>Consult Factory for Availability</p>	<p>Milpack (E)</p> 	<p>SMD 1 (S1)</p> 
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Electrical Characteristic ^{5/}		Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (T _A = 25°C, 300 – 500usec Pulse)	I _F = 10A	V _{F1}	—	0.94	V _{DC}
	I _F = 20A	V _{F2}	—	1.02	
Instantaneous Forward Voltage Drop (I _F = 10A, 300 – 500usec Pulse)	T _A = -55 °C	V _{F3}	—	1.04	V _{DC}
	T _A = 100 °C	V _{F4}	—	0.84	
Reverse Leakage Current (100% of rated V _R , 300 us pulse min.)	T _A = 25 °C	I _{R1}	—	10	μA
	T _A = 100 °C	I _{R2}	—	1000	
Reverse Recovery Time (I _F = 0.5A, I _R = 1A, I _{RR} = 0.25A, T _A = 25°C)		t _{RR}	—	35	nsec
Junction Capacitance (V _R =10V _{DC} , T _A =25°C, f=1MHz)		C _J	—	225	pF

NOTES:

1/ For Ordering Information, Price, and Availability Contact Factory.
 2/ Screening per MIL-PRF-19500.
 3/ For Package Outlines Contact Factory.
 4/ Both legs tied together
 5/ All Electrical Characteristics Per Leg @25 °C, Unless Otherwise Specified.

Available Part Numbers: SDR620CT , SDR620CTE, SDR620CTS1 SDR621CT , SDR621CTE, SDR621CTS1 SDR622CT , SDR622CTE, SDR622CTS1	PIN ASSIGNMENT			
	PACKAGE	Pin 1	Pin 2	Pin 3
	LCC3, Milpack1, SMD1	Anode 1	Cathode	Anode 2