



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638

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

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

**SDR620CT/CAP6
THRU
SDR622CT/CAP6**

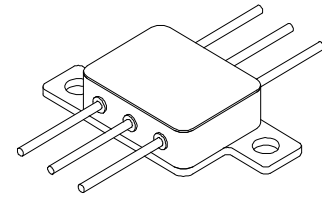
**80 AMP
100-200 Volts
35nsec
COMMON ANODE & CATHODE
HYPERFAST CENTERTAP
RECTIFIER**

DESIGNER'S DATA SHEET

Features:

- Hyper Fast Recovery: 35nsec Maximum
- Isolated low profile package
- Ceramic Feed Thrus
- Eutectic Die Attach Available
- Hermetically Sealed
- Low Reverse Leakage
- TX, TXV, and Space Level Screening Available.

6 PIN TO-259



Maximum Ratings		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage ^{3/}	SDR620CT/CAP6	V_{RRM}	100	Volts
	SDR621CT/CAP6	V_{RWM}	150	
	SDR622CT/CAP6	V_R	200	
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ\text{C}$)		I_o	80	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$) ^{1/}		I_{FSM}	500	Amps
Operating & Storage Temperature		Top & Tstg	-65 to +200	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case, each individual diode		R_{qJL}	1.2	$^\circ\text{C/W}$
Junction to Case, ^{2/}			0.65	

^{1/} Each pair of diodes

^{2/} All legs connected together

^{3/} 250V class available

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

DATA SHEET #: RH0015B

DOC



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638
 Phone: (562) 404-7855 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

**SDR620CT/CAP6
 THRU
 SDR622CT/CAP6**

Electrical Characteristics	Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (IF=10Adc, TA = 25°C, 300 μsec pulse) (IF=20Adc, TA = 25°C, 300 μsec pulse)	V_{F1}	—	1.0 1.2	Volts
Instantaneous Forward Voltage Drop (IF= 10Adc, TA = 100°C, 300 μsec pulse) (IF= 10Adc, TA = -55°C, 300 μsec pulse)	V_{F2}	—	0.9 1.15	Volts
Reverse Leakage Current (Rated V _R , TA = 25°C, 300 μsec pulse minimum)	I_{R1}	—	10	mA
Reverse Leakage Current (Rated V _R , TA = 100°C, 300 μsec pulse minimum)	I_{R2}	—	1	mA
Junction Capacitance (V _R = 10 Vdc, TA = 25°C, f = 1MHz)	C_J	—	225	pF
Reverse Recovery Time (I _F = 0.5A, I _R = 1A, I _{RR} = 0.25A, TA = 25°C)	t_{rr}	—	35	nsec

CASE OUTLINE: TO-259-6

PIN OUT:

COMMON ANODE

PIN 1: CATHODE

PIN 2: ANODE

PIN 3: CATHODE

COMMON CATHODE

PIN 4: ANODE

PIN 5: CATHODE

PIN 6: ANODE

