

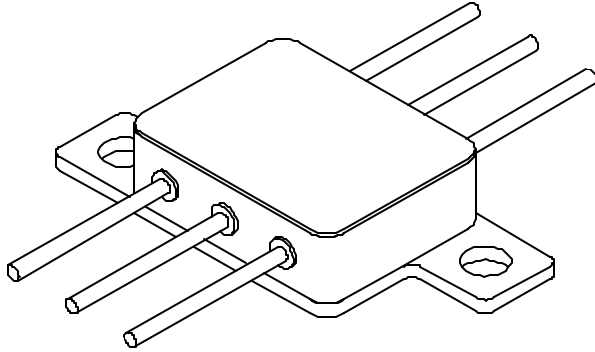


Solid State Devices, Inc.

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

DESIGNER'S DATA SHEET ^{1/}

6 Pin TO-259



**SDR623CT/CA
 thru
 SDR626CT/CA**

**40A 35nsec 300-600 V
 Common Anode & Common Cathode
 Hyper Fast Centertap Rectifier**

Features:

- Hyper Fast Recovery: 35nsec Maximum ^{3/}
- Isolated Low Profile Package
- Low Reverse Leakage Current
- Eutectic Die Attach Available
- Hermetically Sealed Package
- Dual Centertap: 1 Common Anode,
1 Common Cathode
- Optional Bent Leads Available
- TX, TXV, and S-Level Screening Available ^{2/}

Maximum Ratings ^{6/}		Symbol	Value	Units
Peak Repetitive Reverse Voltage	SDR623CT/CA	V_{RRM} V_{RWM} V_R	300	Volts
	SDR624CT/CA		400	
	SDR625CT/CA		500	
	SDR626CT/CA		600	
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ\text{C}$)	Total	I_o	80	Amps
Peak Surge Current ^{5/} (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$)		I_{FSM}	200	Amps
Operating & Storage Temperature		T_{OP} & T_{STG}	-65 to +200	$^\circ\text{C}$
Maximum Total Thermal Resistance Junction to Case ^{4/} Junction to Case ^{5/}		R_{qJC}	0.65 1.9	$^\circ\text{C}/\text{W}$

Notes:

- 1/ For ordering information, Price, Operating Curves, and Availability- Contact Factory.
- 2/ Screened to MIL-PRF-19500.
- 3/ Recovery Conditions: $I_F = 0.5$ Amp, $I_R = 1.0$ Amp, rec. to 0.25 Amp.
- 4/ All Legs Tied Together.
- 5/ Each Leg.
- 6/ Ratings at 25°C (Unless Otherwise Specified).

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

DATA SHEET #: RH0231G

DOC

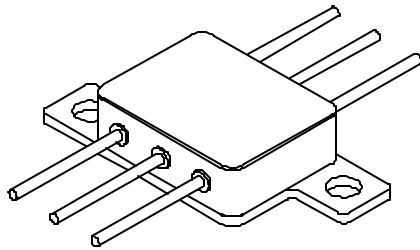


Solid State Devices, Inc.

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

SDR623CT/CA
 thru
SDR626CT/CA

Electrical Characteristics		Symbol	Max	Units
Instantaneous Forward Voltage Drop ($I_F = 10\text{Adc}$, Pulse)	$T_A = 25^\circ\text{C}$	V_{F1}	1.45	V_{DC}
	$T_A = 25^\circ\text{C}$	V_{F2}	1.65	
Instantaneous Forward Voltage Drop ($I_F = 10\text{Adc}$, Pulse)	$T_A = 100^\circ\text{C}$	V_{F3}	1.35	V_{DC}
	$T_A = -55^\circ\text{C}$	V_{F4}	1.55	
Reverse Leakage Current (100% of rated V_R , Pulse)	$T_A = 25^\circ\text{C}$	I_{R1}	50	mA
	$T_A = 100^\circ\text{C}$	I_{R2}	5	mA
Reverse Recovery Time ($I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$, $T_A = 25^\circ\text{C}$)		t_{rr}	35	nsec
Junction Capacitance ($V_R = 10V_{DC}$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)		C_J	150	pF



PIN ASSIGNMENT			
Configuration	Pin 1	Pin 2	Pin 3
Common Cathode	Anode 1	Cathode	Anode 2
Configuration	Pin 4	Pin 5	Pin 6
Common Anode	Cathode 1	Anode	Cathode 2

