

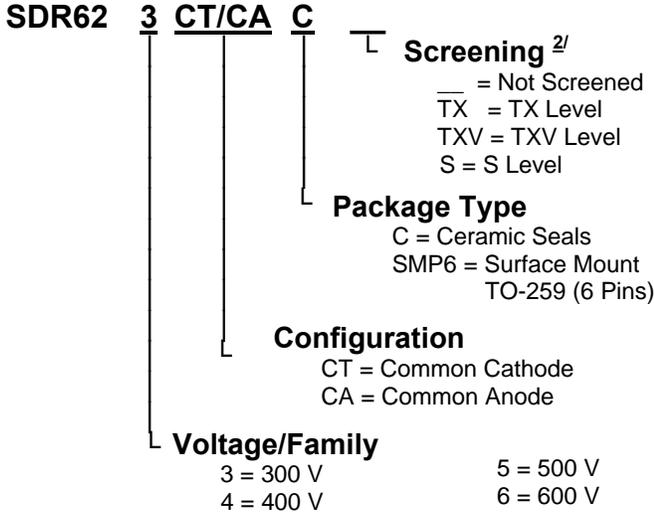


Solid State Devices, Inc.

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

Part Number / Ordering Information^{1/}



**SDR623CT/CA
 thru
 SDR626CT/CA**

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

Features:

- Hyper Fast Recovery: 35 nsec 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
- Easy to Implement as a Powerful Full Bridge Rectifier
- Optional Bent Leads Available
- Contact Factory for:
 - Higher Voltages
 - Fast and Ultrafast Recovery Versions
- Weight: 7.5 g (typ)
- TX, TXV, and S-Level Screening Available^{2/}

Maximum Ratings^{6/}

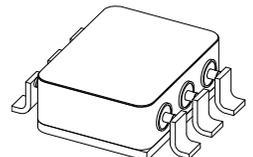
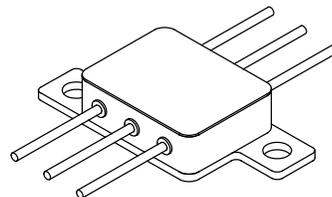
		Symbol	Value	Units
Peak Repetitive Reverse Voltage	SDR623CT/CA	V_{RRM}	300	Volts
	SDR624CT/CA	V_{RWM}	400	
	SDR625CT/CA	V_R	500	
	SDR626CT/CA		600	
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ\text{C}$)	Total	I_o	80	Amps
Peak Surge Current^{5/} (8.3 ms Pulse, Half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

Notes:

- 1/ For ordering information, price, operating curves, and availability- contact factory.
- 2/ Screening based on MIL-PRF-19500. Screening flows available on request.
- 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).

6 Pin TO-259

**Surface Mount
6 Pin TO-259**



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

DATA SHEET #: RH0231H

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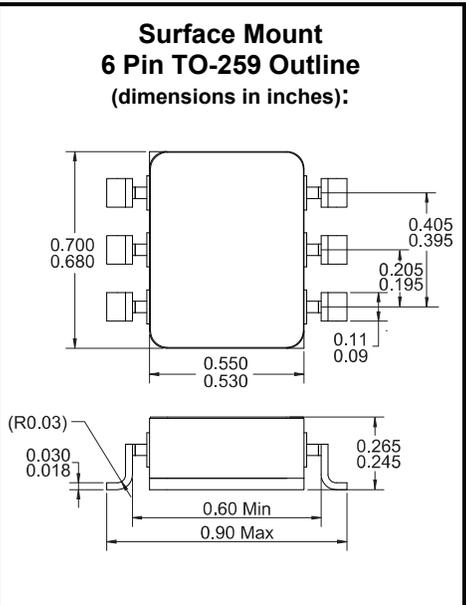
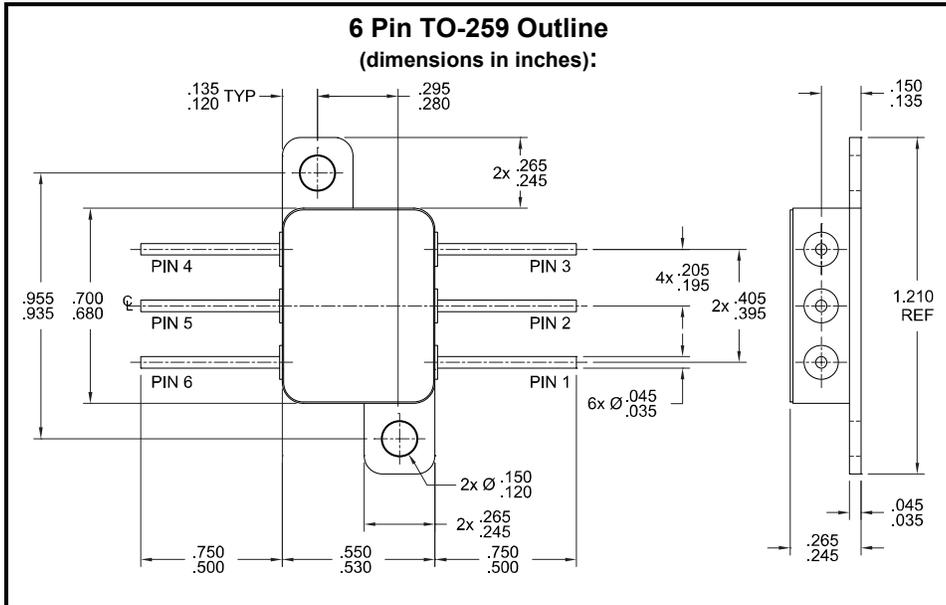


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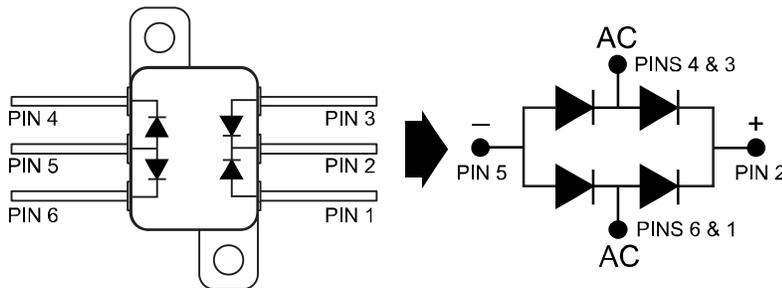
**SDR623CT/CA
 thru
 SDR626CT/CA**

Electrical Characteristics		Symbol	Max	Units
Instantaneous Forward Voltage Drop ($I_F = 10 A_{DC}$, Pulse) ($I_F = 20 A_{DC}$, Pulse)	$T_A = 25^\circ C$	V_{F1}	1.45	V_{DC}
	$T_A = 25^\circ C$	V_{F2}	1.65	
Instantaneous Forward Voltage Drop ($I_F = 10 A_{DC}$, Pulse)	$T_A = 100^\circ C$	V_{F3}	1.35	V_{DC}
	$T_A = -55^\circ C$	V_{F4}	1.55	
Reverse Leakage Current (100% of rated V_R , Pulse)	$T_A = 25^\circ C$	I_{R1}	50	μA mA
	$T_A = 100^\circ C$	I_{R2}	5	
Reverse Recovery Time ($I_F = 0.5 A$, $I_R = 1 A$, $I_{RR} = 0.25 A$, $T_A = 25^\circ C$)		t_{rr}	35	nsec
Junction Capacitance ($V_R = 10 V_{DC}$, $T_A = 25^\circ C$, $f = 1MHz$)		C_J	150	pF



Easy to Implement as a Powerful FULL BRIDGE RECTIFIER

Tolerances Unless Specified-
 .XX $\pm .020$ "
 .XXX $\pm .010$ "



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

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