

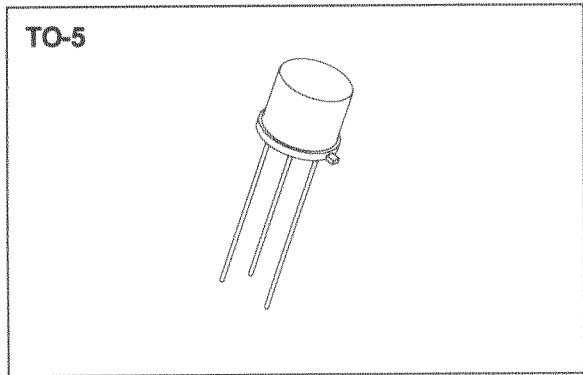
**SDR5807CT/5  
 thru  
 SDR5811CT/5**

**12 AMP  
 50-150 VOLTS  
 35 nsec  
 HYPER FAST  
 CENTERTAP RECTIFIER**

**Designer's Data Sheet**

**FEATURES:**

- Replaces two 1N5807-1N5811 types
- Low cost alternative to two axial devices
- Similar VF to 1N5807-1N5811 types
- Hyper Fast Recovery: 35 nsec Maximum
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed Package
- Gold Eutectic Die Attach available
- Ultrasonic Aluminum Wire Bonds
- Lower Thermal Resistance than 1N5807-1N5811
  
- TX, TXV and Space Level Screening Available



**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage(Per Leg)  SDR5807CT/5 SDR5809CT/5 SDR5811CT/5	VRRM  VRWM  VR	  50 100 150	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C) note 1	IO	12	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave ,TA=25°C) note 1	IFSM	125	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Case, each individual diode Junction to Case, note 1	RθJC	26 16	°C/W

note 1 Both legs tied together

NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.	<b>DATA SHEET#: RH0149 A</b>	<b>MED</b>
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**SDR5807CT/5  
thru  
SDR5811CT/5**

PRELIMINARY



**SOLID STATE DEVICES, INC**

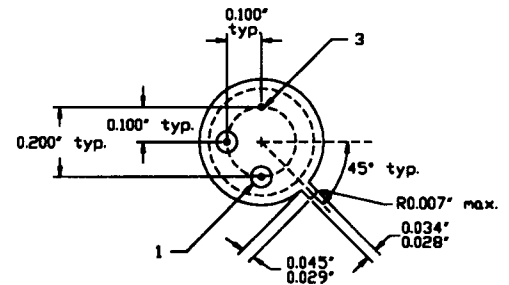
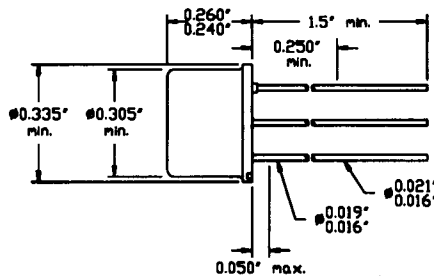
14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

**ELECTRICAL CHARACTERISTICS (Per Leg)**

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> (IF = 2 Adc, TA=25°C, 300µs Pulse) (IF = 4 Adc, TA=25°C, 300µs Pulse) (IF = 6 Adc, TA=25°C, 300µs Pulse)	VF	0.85	Vdc
		0.95	
		1.00	
<b>Instantaneous Forward Voltage Drop</b> (IF = 4 Adc, TA= 100°C, 300µs Pulse) (IF = 4 Adc, TA= -55°C, 300µs Pulse)	VF	0.85 1.05	Vdc
<b>Reverse Leakage Current</b> (Rated VR, TA=25°C, 300µs pulse minimum)	IR	5	µA
<b>Reverse Leakage Current</b> (Rated VR, TA=100°C, 300µs pulse minimum)	IR	150	µA
<b>Junction Capacitance</b> (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	60	pf
<b>Reverse Recovery Time</b> (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	35	nsec

**CASE OUTLINE: TO-5**

**PIN 1: ANODE 1  
PIN 2: ANODE 2  
PIN 3: CATHODE**



**TYPICAL OPERATING CURVES**

TA=25°C Unless otherwise specified

