

**SDR5807CT/5
 thru
 SDR5811CT/5**

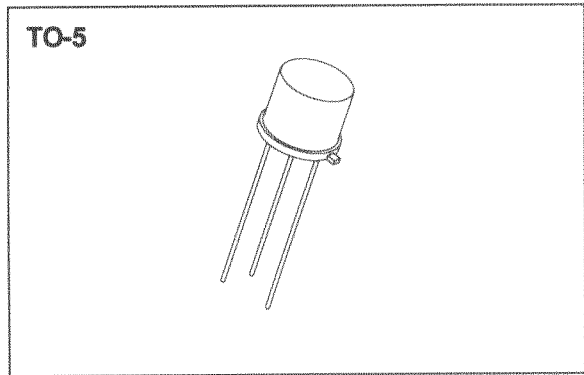
**12 AMP
 50-150 VOLTS
 35 nsec
 HYPER FAST
 CENTERTAP RECTIFIER**

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

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PRELIMINARY



SOLID STATE DEVICES, INC

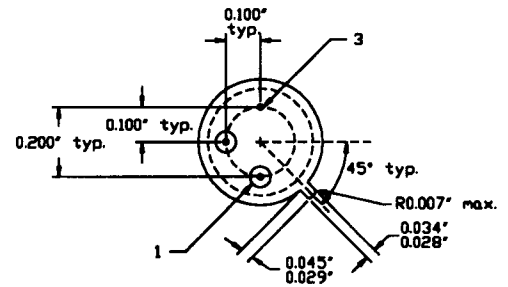
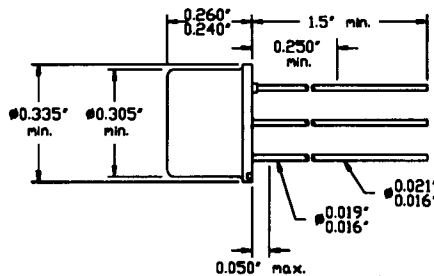
14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

ELECTRICAL CHARACTERISTICS (Per Leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (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	
Instantaneous Forward Voltage Drop (IF = 4 Adc, TA= 100°C, 300µs Pulse) (IF = 4 Adc, TA= -55°C, 300µs Pulse)	VF	0.85 1.05	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300µs pulse minimum)	IR	5	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300µs pulse minimum)	IR	150	µA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	60	pf
Reverse Recovery Time (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

