

Designer's Data Sheet

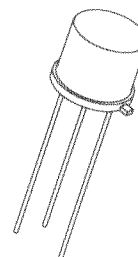
FEATURES:

- 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

**SDR5807CT/5
thru
SDR5811CT/5**

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

TO-5



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage(Per Leg)	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

SDR5807CT/5 thru SDR5811CT/5

PRELIMINARY



SOLID STATE DEVICES, INC

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ELECTRICAL CHARACTERISTICS (Per Leg)

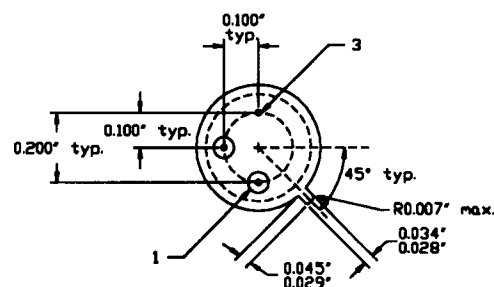
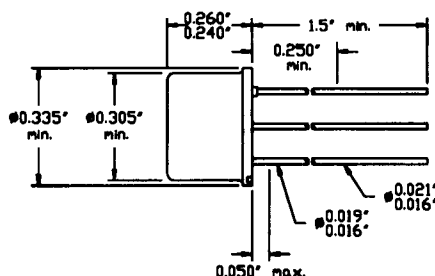
CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 2 Adc, TA=25°C, 300µs Pulse) (IF = 4 Adc, TA=25°C, 300µs Pulse) (IF = 6 Adc, TA=25°C, 300µs Pulse)	VF	0.85 0.95 1.00	Vdc
Instantaneous Forward Voltage Drop (IF = 4 Adc, TA= 100°C, 300µs Pulse) (IF = 4 Adc, TA= -55°C, 300µs Pulse)		0.85 1.05	
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

