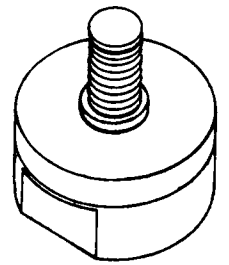


X00054

<b>SDR1004UF through SDR1010UF</b> <b>100 AMP</b> <b>ULTRAFAST RECOVERY</b> <b>RECTIFIER</b> <b>400 - 1000 VOLT</b>	<b>SSDI</b>  14830 VALLEY VIEW AVE LA MIRADA, CA 90638 TEL: (213) 921-9660 FAX: (213) 921-2396
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**CASE STYLE S1000**

**FEATURES**



- ▶ PIV 400 TO 1000 VOLTS
- ▶ FAST SWITCHING 60ns TYPICAL
- ▶ LOW REVERSE LEAKAGE
- ▶ LOW THERMAL IMPEDANCE
- ▶ HIGH SURGE CAPABILITY
- ▶ REVERSE POLARITY UNITS AVAILABEL, ADD SUFFIX "R" TO PART NUMBER

**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage  SDR1004UF SDR1006UF SDR1008UF SDR1010UF	VRM(rep) VR	400 600 800 1000	Volts
RMS Reverse Voltage  SDR1004UF SDR1006UF SDR1008UF SDR1010UF	Vr	280 420 560 700	Volts
Half Wave Rectified Forward Current Averaged Over Full Cycle (Resistive Load, 60Hz, Sine Wave, TC=25 °C)	IO	100	Amps
Peak Repetitive Forward Current (TC=55 °C, 8.3ms Pulse, Allow Junction to Reach Equilibriun Between Pulses)	IFM(rep)	180	Amps
Peak Surge Current (TC=55 °C, 8.3ms Pulse, Superimposed on Rated Current at Rated Voltage)	IFM(surge)	1250	Amps
Operating and Storage Temperature	TJ, Tstg	-65 to +150	°C

**THERMAL CHARACTERISTICS**

CHARACTERISTIC	SYMBOL	VALUE	UNIT
Thermal Resistance, Junction to Case	RθJC	0.5	°C/W

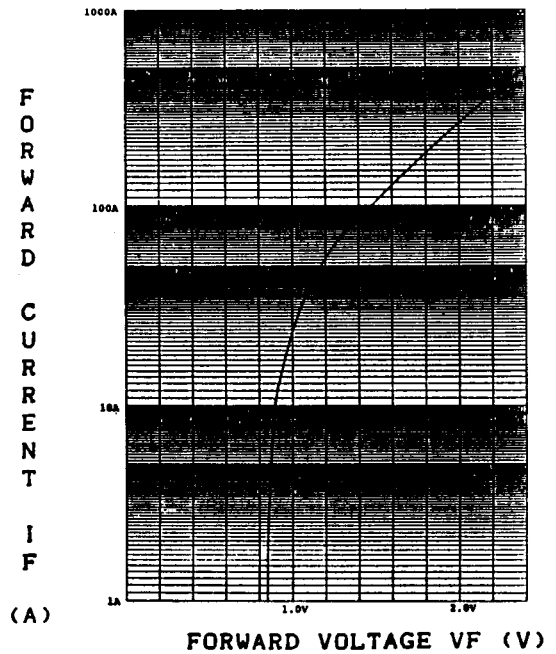
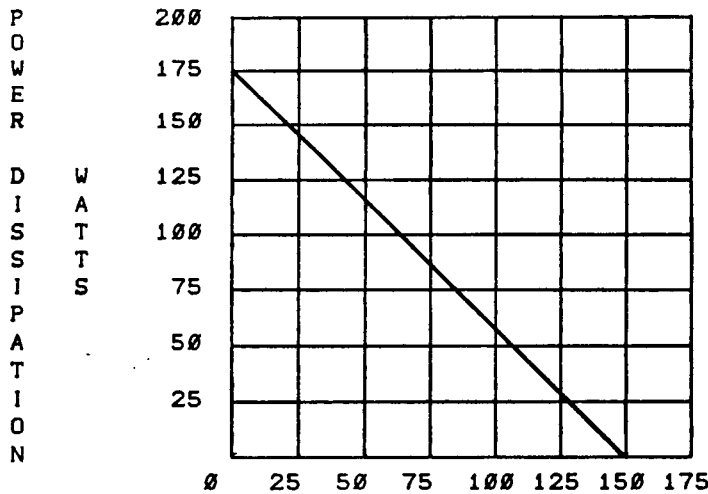
# ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	VALUE	UNITS
Max Full Cycle Forward Voltage Drop, Averaged Over Full Cycle (IO(MAX), 60Hz, Square Wave, TC=55 °C)	VF(AV)	.85	Volts
Max Instantaneous Forward Voltage Drop (IF= 100Adc, TJ = 25 °C)	VF	1.7	Volts
Max Full Cycle Leakage Current Averaged Over Full Cycle (Rated VR, 60Hz, Square Wave, TC= 100 °C)	IR(AV)	2.0	mAdc
Max Reverse Leakage Current (Rated VR, TC=25 °C)	IR	50	μAdc

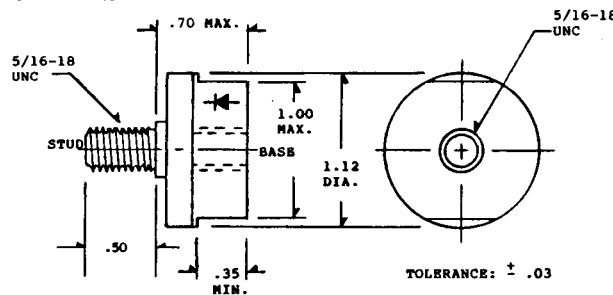
# REVERSE RECOVERY CHARACTERISTICS

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Recovery Time (IF= 500mA, IR = 1A, IRR = 250mA)	trr		60	80	ns

# TYPICAL OPERATING CURVES



# PHYSICAL DIMENSIONS



**SSDI** SOLID STATE DEVICES, INC.  
 14849 FIRESTONE BOULEVARD ♦ LA MIRADA, CA 90638  
 TELEPHONE: (213) 921-9660 ♦ FAX: (213) 921-2396