PRELIMINARY

SOLID STATE DEVICES, INC

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

SDR627/59 thru SDR628/59

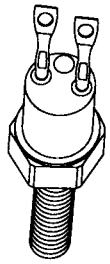
20 AMPS 700-800 VOLTS 60 nsec ULTRA FAST RECTIFIER

Designer's Data Sheet

FEATURES:

- Ultrafast Recovery: 60 nsec Maximum
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed Package
- Gold Eutectic Die Attach
- Ultrasonic Aluminum Wire Bonds
- TX, TXV and Space Level Screening Available

TO-59



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR627/59 SDR628/59	V_{RRM} V_{RWM} V_R	700 800	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	I_O	20	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave , TA=25°C)	I_{FSM}	200	Amps
Operating and storage temperature	T_{op} & T_{stg}	-65 to +200	°C
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	2.4	°C/W

SDR627/59 thru SDR628/59

PRELIMINARY

SOLID STATE DEVICES, INC

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

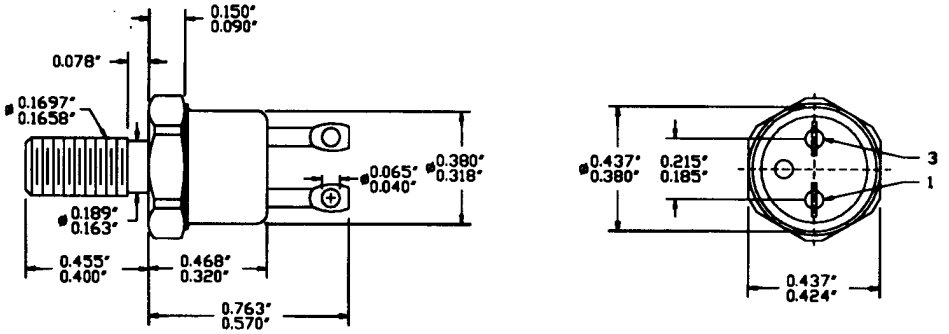
ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA=25°C, 300ms Pulse) (IF = 20 Adc, TA=25°C, 300ms Pulse)	VF	1.30 1.55	Vdc
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA=100°C, 300ms Pulse) (IF = 10 Adc, TA= - 55°C, 300ms Pulse)	VF	1.22 1.40	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300ms pulse minimum)	IR	50	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300ms pulse minimum)	IR	5	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	70	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	60	nsec

CASE OUTLINE: TO-59

PIN OUT:

PIN 1: ANODE
PIN 3: CATHODE



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified