

**Solid State Devices, Inc.**

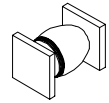
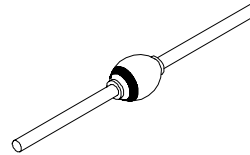
14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

ssdi@ssdi-power.com * www.ssdi-power.com

DESIGNER'S DATA SHEET**Features:**

- Hyper Fast Recovery: 35 nsec maximum
- PIV to 1200 Volts
- Hermetically Sealed
- Void Free Construction
- For High Efficiency Applications
- Single Chip Construction
- Low Reverse Leakage
- TX, TXV, S Level screening Available

**SDR1AHF & SDR1AHFSMS
thru
SDR1NHF & SDR1NHFSMS****1 AMP
50 - 1200 V
35 nsec
Hyper Fast Rectifier****Axial Lead Diode****SMS**

Maximum Ratings		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	SDR1AHF	V_{RRM} V_{RSM} V_R	50	Volts
	SDR1BHF		100	
	SDR1DHF		200	
	SDR1GHF		400	
	SDR1JHF		600	
	SDR1KHF		800	
	SDR1MHF		1000	
	SDR1NHF		1200	
Average Rectified Forward Current (Resistive Load, 60 hz Sine Wave, $T_A = 25^\circ\text{C}$)		I_O	1.0	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$)		I_{FSM}	25	Amps
Operating & Storage Temperature		T_{OP} & T_{STG}	-65 to +175	$^\circ\text{C}$
Maximum Thermal Resistance	Junction to Leads, $L = 3/8$	$R_{\theta JE}$	35	$^\circ\text{C/W}$
	Junction to Tabs		28	

NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: RH0119C**DOC**



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638

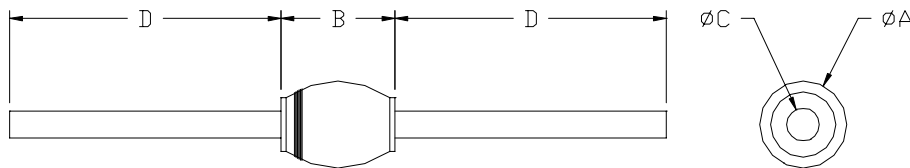
Phone: (562) 404-7855 * Fax: (562) 404-1773

ssdi@ssdi-power.com * www.ssdi-power.com

**SDR1AHF & SDR1AHFSMS
thru
SDR1NHF & SDR1NHFSMS**

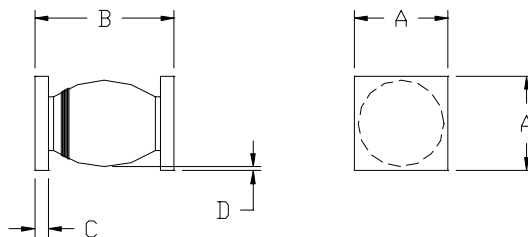
Electrical Characteristic		Symbol	Max	Units
Instantaneous Forward Voltage Drop ($I_F = 1A_{DC}$, $T_A = 25^\circ C$, pulsed)	SDR1AHF – SDR1JHF SDR1KHF – SDR1NHF	V_F	3.3 3.5	V_{DC}
Instantaneous Forward Voltage Drop ($I_F = 1A_{DC}$, $T_A = -55^\circ C$, pulsed)	SDR1AHF – SDR1JHF SDR1KHF – SDR1NHF	V_F	3.4 3.6	V_{DC}
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ C$, pulsed)		I_R	5	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, pulsed)		I_R	200	μA
Reverse Recovery Time ($I_F = 500mA$, $I_R = 1A$, $I_{RR} = 250Ma$, $T_A = 25^\circ C$)		t_{RR}	35	nsec
Junction Capacitance ($V_R = 10V_{DC}$, $f = 1MHz$, $T_A = 25^\circ C$)		C_J	20	pF

Case Outline: (Axial)



DIM	MIN	MAX
A	—	0.150"
B	—	0.190"
C	0.027"	0.033"
D	0.950"	—

Case Outline: (SMS)



DIM	MIN	MAX
A	0.134"	0.153"
B	0.200"	0.280"
C	0.022"	0.028"
D	0.002"	--