





**Solid State Devices, Inc.**

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**SDR2HF1.8 and SMS  
 SDR2HF2.0 and SMS**

ELECTRICAL CHARACTERISTICS		Symbol	Min	Max	Unit
<b>Breakdown Voltage</b> ( $I_R = 50 \mu A$ , $T_A = 25^\circ C$ , Pulse)	<b>SDR2HF1.8 &amp; SMS SDR2HF2.0 &amp; SMS</b>	$BV_R$	1800 2000	— —	Volts
<b>Instantaneous Forward Voltage Drop</b> ( $T_A = 25^\circ C$ , Pulse)	$I_{F1} = 1 A$ $I_{F2} = 2 A$	$V_{F1}$	—	8.0	Volts
		$V_{F2}$	—	11.0	Volts
<b>Instantaneous Forward Voltage Drop</b> ( $T_A = -55^\circ C$ , Pulse)	$I_{F3} = 1 A$ $I_{F4} = 2 A$	$V_{F3}$	—	8.0	Volts
		$V_{F4}$	—	11.0	Volts
<b>Reverse Leakage Current</b> ( $V_R = 85\%$ rated $V_R$ , Pulse)	$T_A = 25^\circ C$ $T_A = 100^\circ C$	$I_{R1}$	—	10	$\mu A$
		$I_{R2}$	—	250	$\mu A$
<b>Junction Capacitance</b> ( $V_R = 50 V_{DC}$ , $T_A = 25^\circ C$ , $f = 1 MHz$ )		$C_J$	—	20	pF
<b>Reverse Recovery Time</b> ( $I_F = 500 mA$ , $I_R = 1 A$ , $I_{RR} = 250 mA$ , $T_A = 25^\circ C$ )		$t_{rr}$	—	35	ns

**Case Outline: (Axial)**

DIM	MIN	MAX
A	—	0.170"
B	0.210"	0.250"
C	0.045"	0.051"
D	1.00"	—

**Case Outline: (SMS)**

DIM	MIN	MAX
A	0.195"	0.205"
B	0.255"	0.280"
C	0.020"	0.030"
D	0.002"	—

**NOTES:**  
 Consult manufacturing for operating curves.