





**Solid State Devices, Inc.**

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**SDR1304 thru SDR1308  
 SDR1304SMS thru SDR1308SMS**

Electrical Characteristics	Part Type	Symbol	Min	Max	Units
<b>Instantaneous Forward Voltage Drop</b> ( $T_A = 25^\circ\text{C}$ , pulsed) $I_F = 3\text{A}$	SDR1304 - 1306 SDR1308	$V_{F1}$	—	1.25 1.35	Volts
<b>Instantaneous Forward Voltage Drop</b> ( $T_A = -55^\circ\text{C}$ , pulsed) $I_F = 3\text{A}$	SDR1304 - 1306 SDR1308	$V_{F2}$	—	1.40 1.50	Volts
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ\text{C}$ , pulsed)	All	$I_{R1}$	—	10	$\mu\text{A}$
<b>Reverse Leakage Current</b> (Rated $V_R$ , pulsed)	SDR1304 - 1306 @ $125^\circ\text{C}$ SDR1308 @ $100^\circ\text{C}$	$I_{R2}$	—	150 200	$\mu\text{A}$
<b>Junction Capacitance</b> ( $V_R = 10\text{Vdc}$ , $T_A = 25^\circ\text{C}$ , $f = 1\text{MHz}$ )	All	$C_J$	—	50	pF
<b>Reverse Recovery Time</b> ( $I_F = 500\text{mA}$ , $I_R = 1\text{A}$ , $I_{RR} = 0.25\text{A}$ )	All	$t_{rr}$	—	70	nsec

**Case Outline: (Axial)**

**Dimensions SDR1304 & SDR1306**

DIM	MIN	MAX
A	0.140"	0.170"
B	—	0.200"
B (variant A <sup>3/</sup> )	—	0.240"
C	0.047"	0.053"
C (variant A <sup>3/</sup> )	0.037"	0.043"
D	1.00"	—

**Dimensions SDR1308**

DIM	MIN	MAX
A	0.140"	0.170"
B	—	0.215"
B (variant A <sup>3/</sup> )	—	0.240"
C	0.045"	0.053"
C (variant A <sup>3/</sup> )	0.037"	0.043"
D	1.00"	—

**Note: 3/ Variant A (Part Number Suffix "A")**

**Case Outline: Surface Mount (SMS)**

**Dimensions SDR1304 & SDR1306**

DIM	MIN	MAX
A	0.172"	0.180"
B	0.200"	0.250"
C	0.020"	0.035"
D	0.002"	—

**Dimensions SDR1308**

DIM	MIN	MAX
A	0.172"	0.180"
B	0.200"	0.265"
C	0.020"	0.035"
D	0.002"	—