





**Solid State Devices, Inc.**

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**SDR1ASM, SMM, & SMS  
 thru  
 SDR1MSM, SMM, & SMS**

<b>ELECTRICAL CHARACTERISTICS <sup>3/</sup></b>				<b>Maximum Limit</b>			
<b>CHARACTERISTICS</b>		<b>SYMBOL</b>	<b>Package</b>			<b>UNIT</b>	
			<b>SMM</b>	<b>SM</b>	<b>SMS</b>		
Instantaneous Forward Voltage Drop ( $I_F = 1\text{A}_{dc}$ , 300 $\mu\text{s}$ Pulse, $T_A = 25^\circ\text{C}$ )	SDR1A .. thru SDR1D ..	$V_{F1}$	0.96	1.3	0.96	Vdc	
	SDR1G .. thru SDR1J ..		2.7	1.3	1.3		
	SDR1K .. thru SDR1M ..		2.7	2.5	1.9		
Instantaneous Forward Voltage Drop ( $I_F = 1\text{A}_{dc}$ , 300 $\mu\text{s}$ Pulse, $T_A = -55^\circ\text{C}$ )	SDR1A .. thru SDR1D ..	$V_{F2}$	1.05	1.45	2.1	Vdc	
	SDR1G .. thru SDR1J ..		2.85	1.45	2.1		
	SDR1K .. thru SDR1M ..		2.85	2.65	2.3		
Reverse Leakage Current (Rated $V_R$ , 300 $\mu\text{s}$ Pulse Minimum , $T_A = 25^\circ\text{C}$ )	SDR1A .. thru SDR1D ..	$I_{R1}$	5			$\mu\text{A}$	
	SDR1G .. thru SDR1J ..						
	SDR1K .. thru SDR1M ..						
Reverse Leakage Current (Rated $V_R$ , 300 $\mu\text{s}$ Pulse Minimum , $T_A = 100^\circ\text{C}$ )	SDR1A .. thru SDR1D ..	$I_{R2}$	250			$\mu\text{A}$	
	SDR1G .. thru SDR1J ..						
	SDR1K .. thru SDR1M ..						
Junction Capacitance ( $V_R = 10\text{V}_{dc}$ , $T_A = 25^\circ\text{C}$ , $f = 1\text{MHz}$ )	SDR1A .. thru SDR1D ..	$C_J$	20	15	40	pf	
	SDR1G .. thru SDR1J ..		10	15	25		
	SDR1K .. thru SDR1M ..		10	10	15		
Reverse Recovery Time <sup>4/</sup>	SDR1A .. thru SDR1D ..	$t_{rr}$	50		50	ns	
	SDR1G .. thru SDR1J ..			60	60		
	SDR1K .. thru SDR1M ..		70	70	70		
<b>Round Tab Surface Mount (SM):</b>	<b>DIMENSIONS</b>			<b>Square Tab Surface Mount (SMS) :</b>	<b>DIMENSIONS</b>		
	DIM.	MIN.	MAX.		DIM.	MIN.	MAX.
	A	.095"	.105"		A	.134"	.153"
	B	.190"	.210"		B	.200"	.280"
	C	.010"	.030"		C	.022"	.028"
	D	---	---		D	.002"	---
<b>Mini (SMM):</b>	<b>DIMENSIONS</b>						
	DIM.	MIN.	MAX.				
	A	.075"	.085"				
	B	.135"	.145"				
	C	.010"	.030"				
	D	---	---				

**NOTES:**

- 1/ For Ordering Information, Price, Operating Curves, and Availability- Contact Factory.
- 2/ Screened to MIL-PRF-19500.
- 3/ Unless Otherwise Specified, All Electrical Characteristics @25°C.
- 4/ Recovery Conditions:  $I_F = 0.5\text{ Amp}$ ,  $I_R = 1.0\text{ Amp}$ ,  $I_{RR}$  to .25 Amp.