

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIERS

S1A to S1M

DO214-AA(SMB) PLASTIC PACKAGE



Absolute Maximum Ratings (Ratings at $T_A = 25^{\circ}C$ Ambient Temperature unless otherwise specified, Single phase, half wave, $60H_{Z_1}$ resistive or inductive load. For capacitive load, derate current by 20%)

DESCRIPTION	SYMBOL	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified @ T _L =100°C	I _{F(AV)}	1.0			А				
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load		30						А	
(JEDEC method)	IFSM								
Maximum Forward Voltage @ 1A	V _F	1.1			V				
Maximum Reverse Current $T_a = 25^{\circ}C$	I.	5.0					mA		
@ Rated DC Blocking Voltage T _a =125°C	I _R	100						mA	
Typical Junction Capacitance (Note 1)	CJ	12		pF					
Typical Thermal Resistance (Note 2)	R _{th (j-l)}	30		°C/W					
Maximum Reverse Recovery Time (Note 3)	t _{rr}	2.5		μS					
Operating Junction Temperature Range	TJ			- 5	5 to +1	50			°C
Storage Temperature Range	T _{stg}	- 55 to +150			°C				

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0 VDC

2. Thermal resistance from junction to lead mounted on PCB with 0.3 x 0.3"(8.0 x 8.0mm) copper pad areas

3. Reverse recovery test conditions : I_{F} = 0.5A, I_{R} = 1A, I_{rr} =0.25A

S1A_S1M Rev060704E

S1A to S1M

DO214-AA(SMB)

	0.180(4.57)	
0.083(2.11)		0.155(3.94)
0.077(1.96)		¹ ,0.130(3.30)
	· · · · ·	_0.012(0.305)
0.095(2.44)		0.006(0.152)
0.084(2.13)	╚┭┟┙┙	0.008(0.203)
0.060(1.52)	L	
0.030(0.76)	0.220(5.59)	0.004(0.102)
89	0.205(5.21)	
DIMENSION		AND (MM)

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



CDIL is a registered Trademark of **Continental Device India Limited** C-120 Naraina Industrial Area, New Delhi 110 028, India. Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119 email@cdil.com www.cdilsemi.com