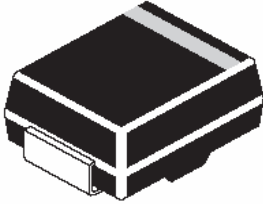


SURFACE MOUNT SUPERFAST RECOVERY RECTIFIER

S2A - S2M



**DO-214AA (SMB)
SMD Plastic Package**

ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at $T_a = 25^\circ\text{C}$ unless specified otherwise, single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.)

Description	Symbols	S2A	S2B	S2D	S2G	S2J	S2K	S2M	Units
Maximum Peak repetitive reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	20	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_L=90^\circ\text{C}$	$I_{(AV)}$	2.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							Amp
Maximum Forward Voltage at 2.0A	V_F	1.15							Volts
Maximum Reverse Current at Rated DC Blocking Voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	5.0 125							uAmp
Typical Junction Capacitance (Note 1)	C_j	30							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	16							$^\circ\text{C/W}$
Maximum Reverse Recovery Time (Note 3)	T_{RR}	2.5							μS
Operating Junction Temperature Range	T_j	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150							$^\circ\text{C}$

NOTES:

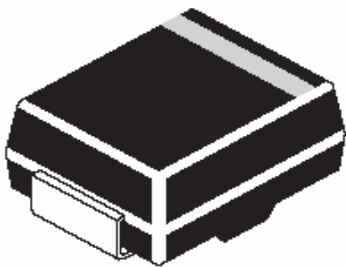
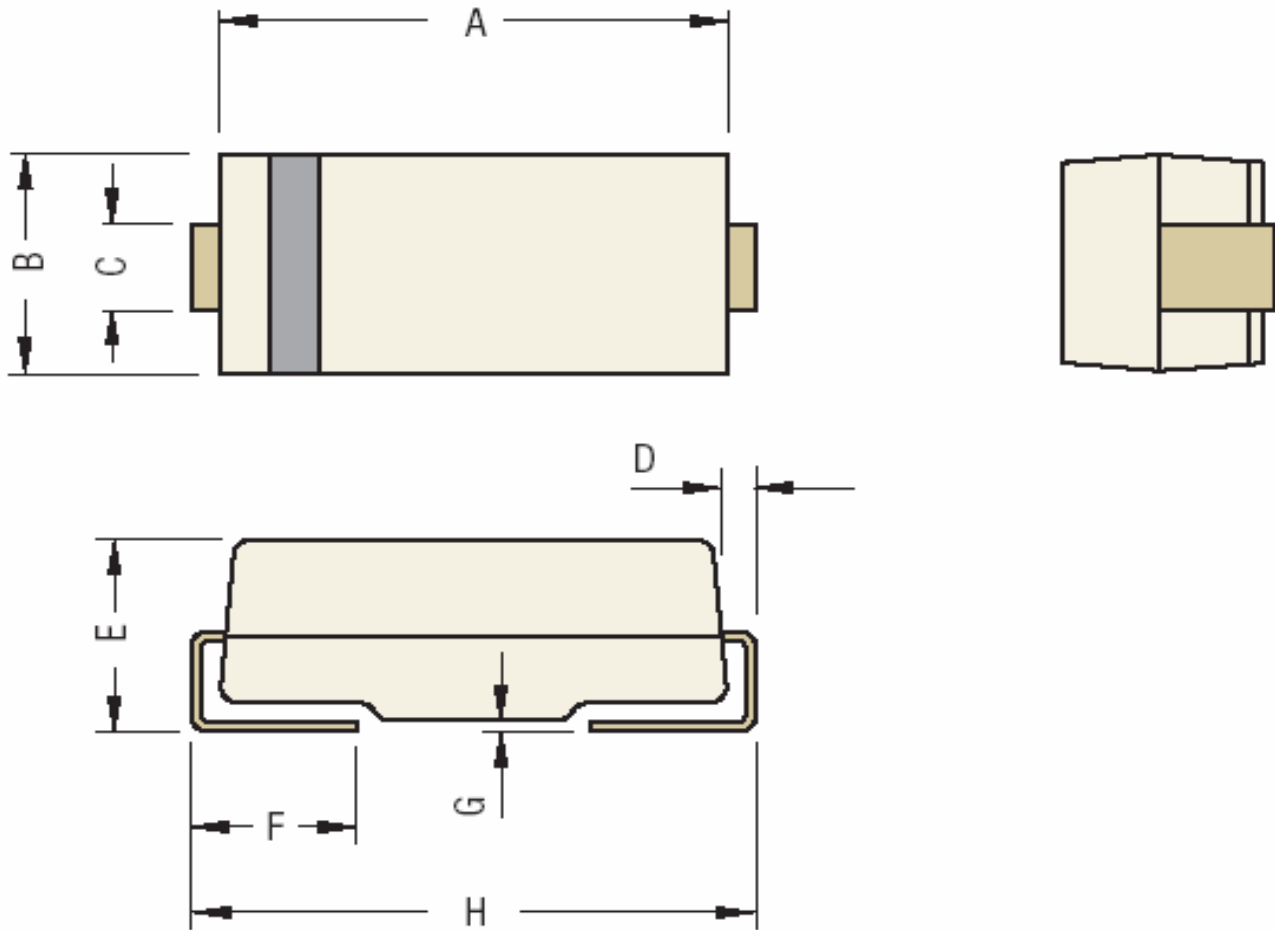
1- Measured at 1 MHz and applied reverse voltage of 4.0 V_{DC}.

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

3-Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$.

S2A_MRRev290506D

DO-214AA (SMB) SMD Plastic Package

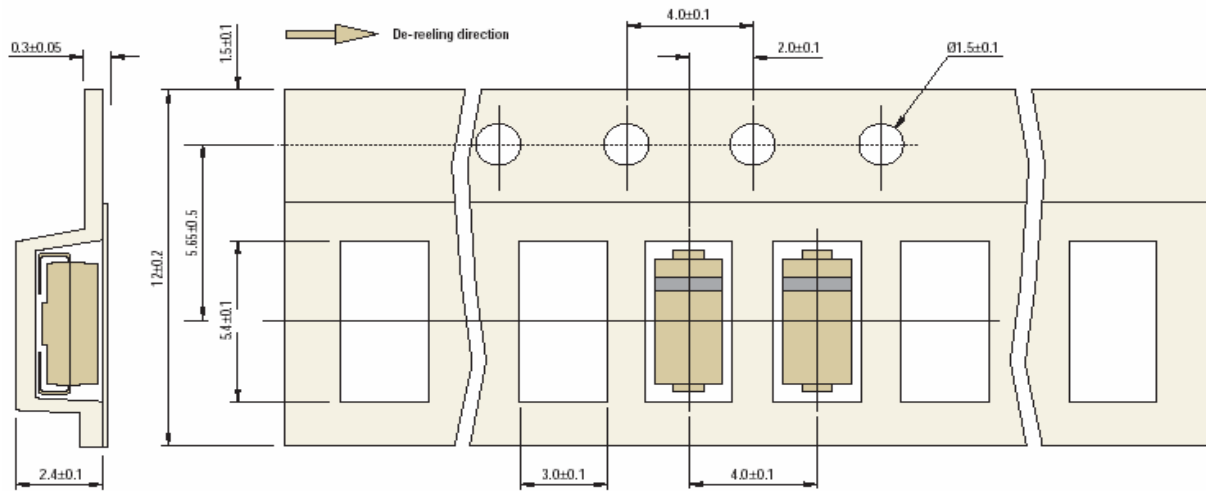


DIM	Min	Max
A	6.60	7.11
B	5.59	6.22
C	2.75	3.25
D	0.152	0.305
E	2.00	2.62
F	0.76	1.27

DIM	Min	Max
G	0.0151	0.203
H	7.75	8.13

All Dimensions are in mm

SMB Packaging Tape



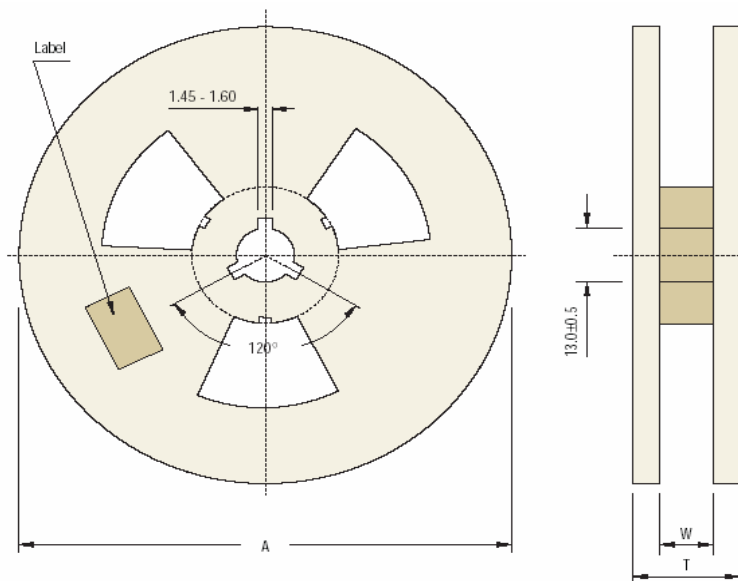
All Dimensions are in mm

Packaging Information

Package/	Packaging Type	Std. Packing	Inner Carton			Outer Carton		
Case Type		Qty	Qty	Size x W x H L (cm)	Gross Weight (Kg)	Qty	Size L x W x H (cm)	Gross Weight (Kg)
DO-214AA (SMB)	T&R	5,000				50K	46 x 38 x 22	8.9

T & R: Tape and Reel

Reel Dimensions and Components/Reel for SMD Package



S2A_MRev290506D

Reel Specifications				
Package	Tape Width	Reel Dia. A - Max	Inside Thickness W	Reel Thickness T - max
DO-214AA (SMB)	12	330	12.4 ± 2	18.4

All Dimensions are in mm

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Customer Notes

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's 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 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.



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