

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SK12 - S110



DO-214AA (SMB)
Surface Mount Package

Polarity : Colour band denotes cathode end

For Use in Low Voltage High Frequency Inverters, Free Wheeling and Polarity Protection Applications

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless specified otherwise. Single phase, half wave Resistive or Inductive Load. ccc

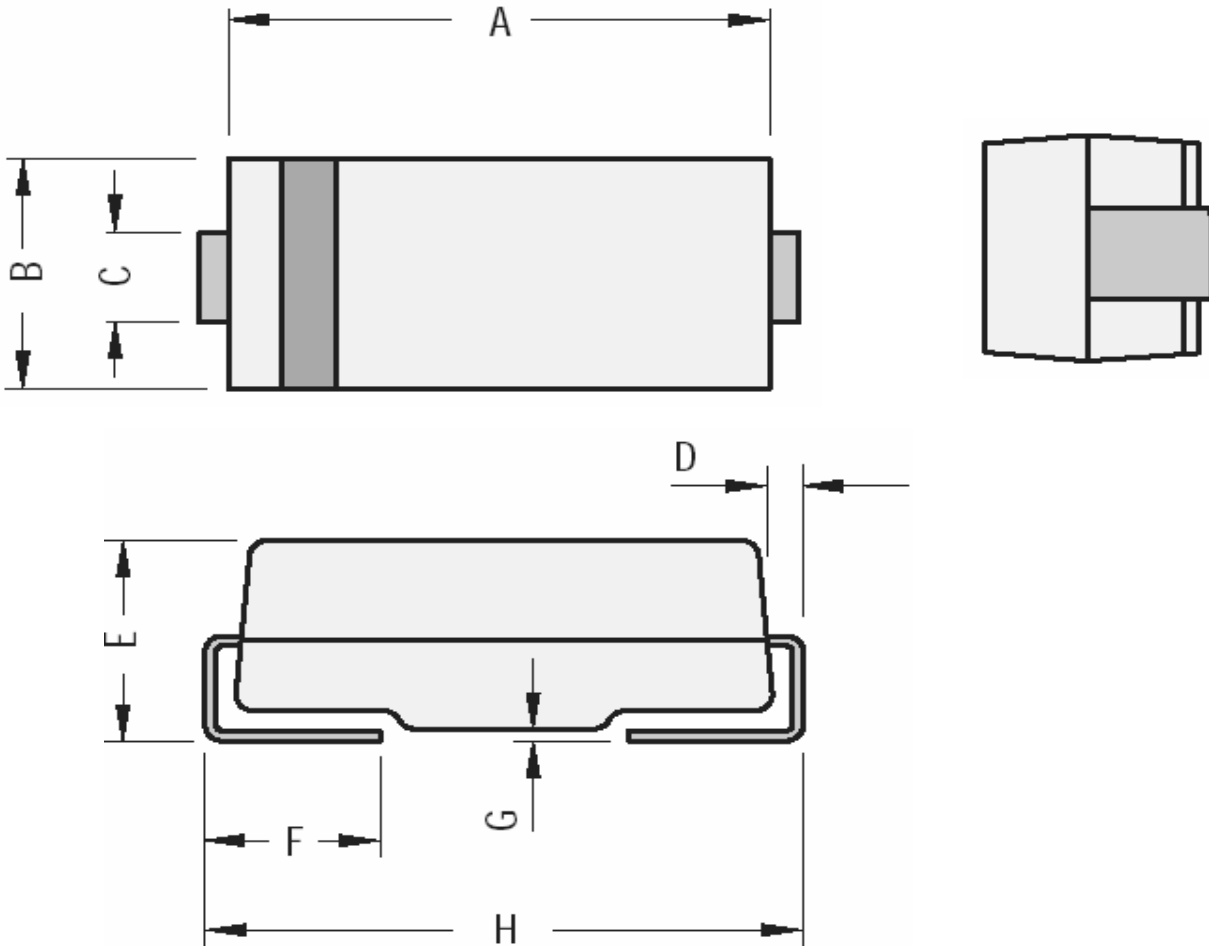
DESCRIPTION	SYMBOL	SK12	SK13	SK14	SK15	SK16	SK18	SK19	S110	UNIT
Maximum Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	64	71	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length at $T_L=75^\circ\text{C}$	$I_{(AV)}$	1.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30								A
Maximum Instantaneous Forward Voltage at $I_F=1.0\text{A}$	$*V_F$	0.50			0.70		0.85			V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	$*I_R$	0.5 20								mA mA
Thermal Resistance Junction to Ambient	** $R_{th(j-a)}$	TYP90								$^\circ\text{C/W}$
Thermal Resistance Junction to Lead	** $R_{th(j-L)}$	TYP35								$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j	- 55 to +125								$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to +150								$^\circ\text{C}$

* Pulse Width=300ms, 1% Duty Cycle.

** Mounted on PCB with 0.2" x 0.2" (5.0 x 5.0 mm) Copper Pad Area

SK12_S110Rev290405E

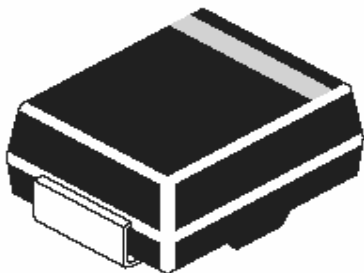
DO-214AA (SMB) SMD Plastic Package



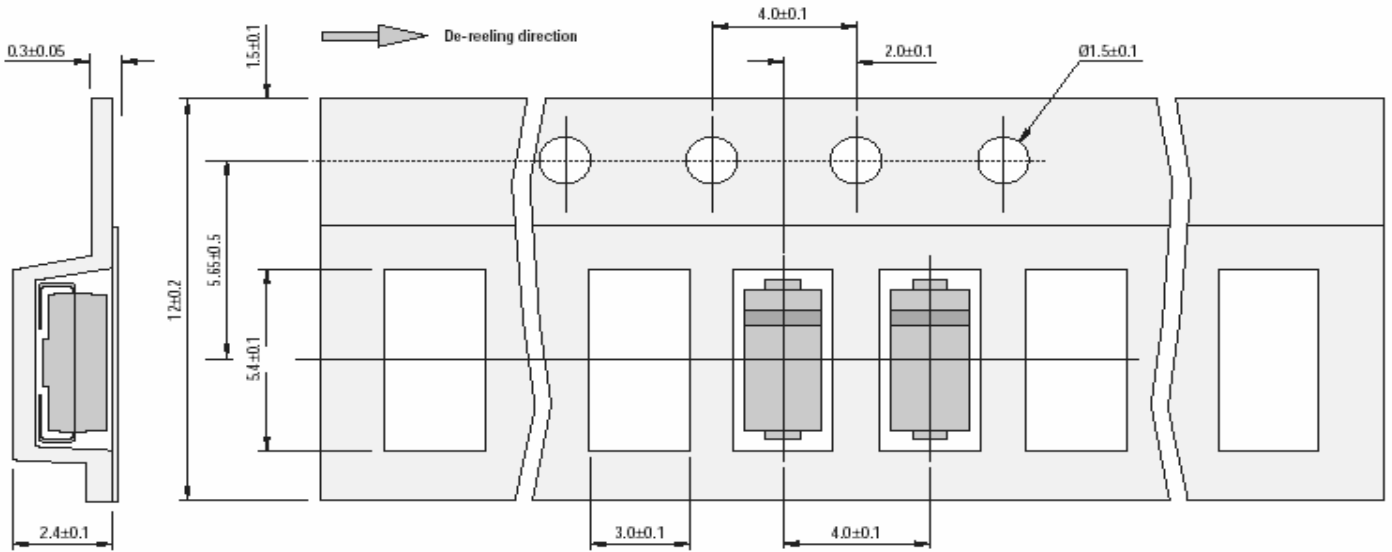
DIM	Min	Max
A	4.06	4.57
B	3.30	3.94
C	1.96	2.11
D	0.152	0.305

DIM	Min	Max
E	2.13	2.44
F	0.76	1.52
G	0.102	0.203
H	5.21	5.59

All Dimensions are in mm



SMB Packing Tape



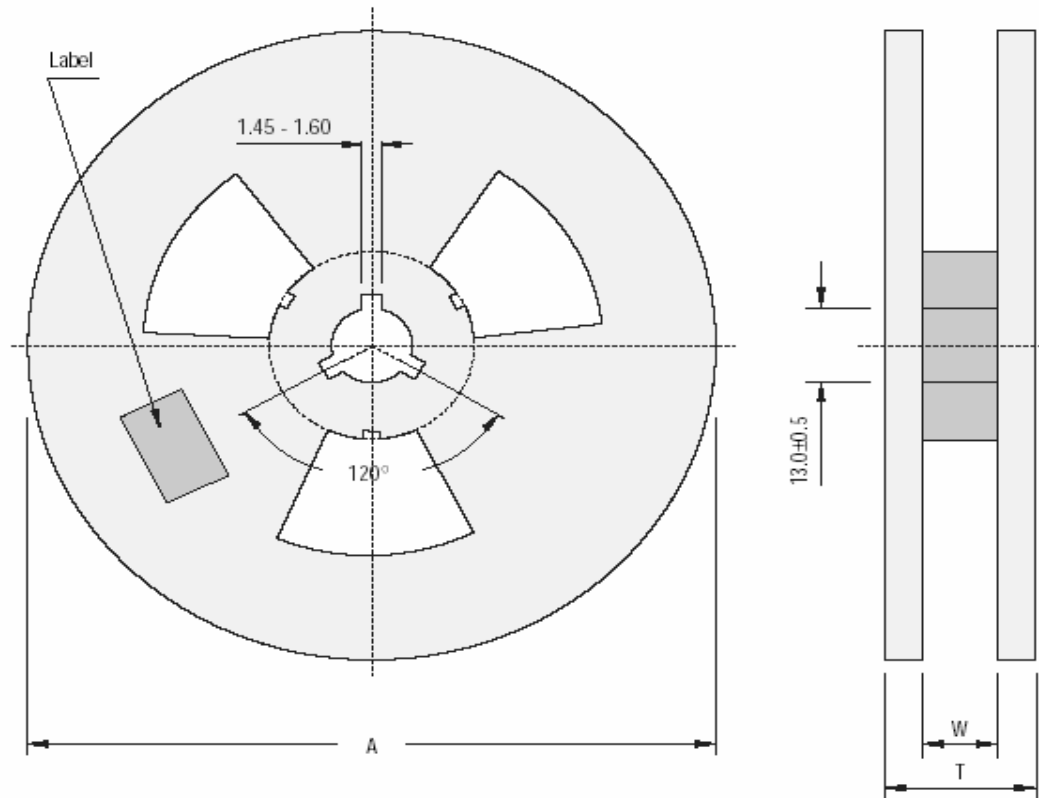
All Dimensions are in mm

Packaging Information

Package/ Case Type	Packaging Type	Std. Packing Qty	Inner Carton		Outer Carton			
			Qty	Size L x W x H (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 for SMD Package



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).

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).

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