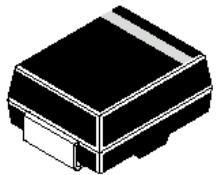


## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SS12 - SS16



DO-214AC (SMA)  
Surface Mount Package

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

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating @ 25°C Ambient Temperature unless specified otherwise. Single Phase, half wave Resistive or Inductive Load. For Capacitive Load, Derate by 20%)

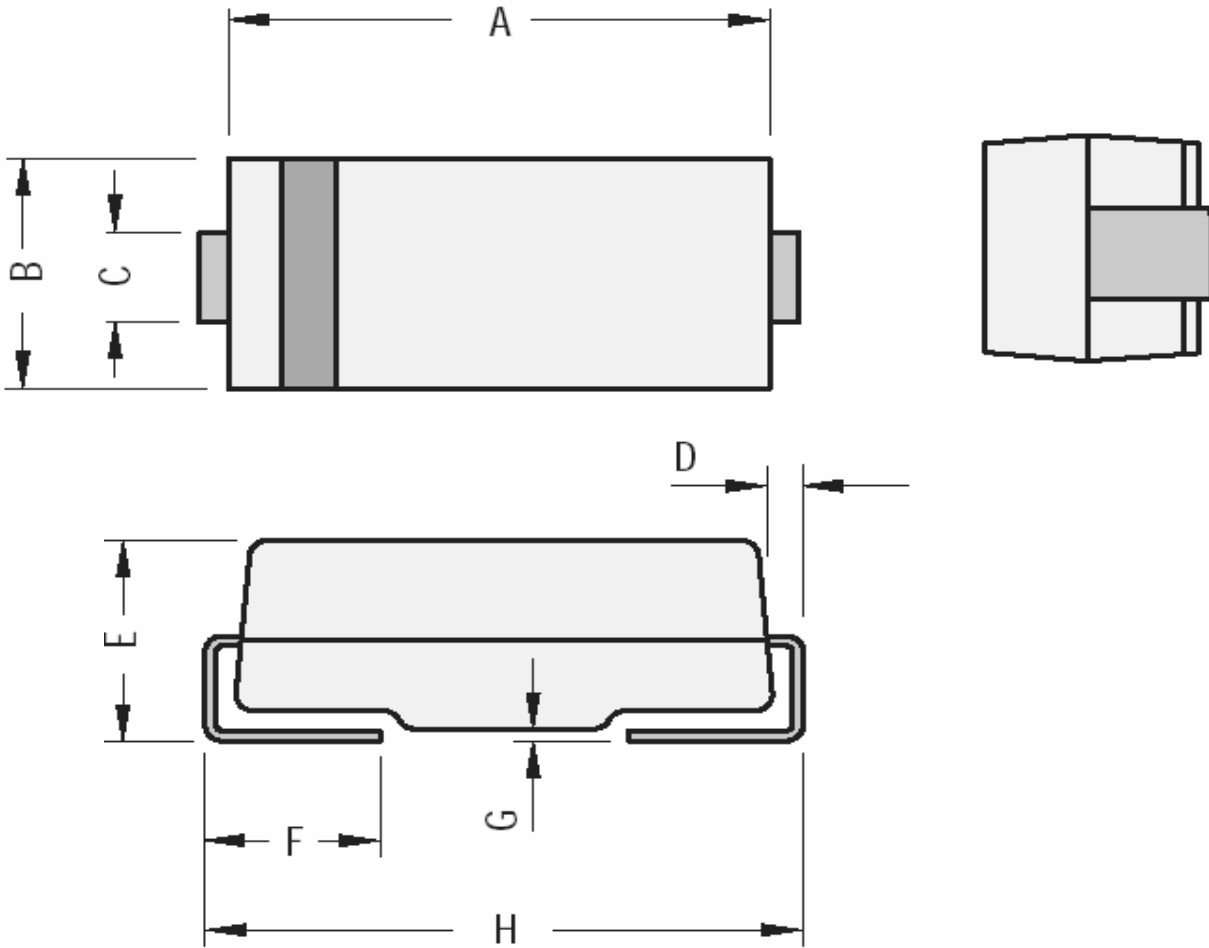
DESCRIPTION	SYMBOL	SS12	SS13	SS14	SS15	SS16	UNIT
Maximum Peak Repetitive Reverse Voltage	$V_{RRM}$	20	30	40	50	60	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length @ $T_L=75^\circ\text{C}$	$I_{(AV)}$	1.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	40					A
Maximum Instantaneous Forward Voltage @ $I_F=1.0\text{A}$	$*V_F$	0.5			0.75		V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$ @ Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	$*I_R$	0.5 10					mA mA
Thermal Resistance Junction to Ambient	$**R_{th(j-a)}$	TYP88					$^\circ\text{C/W}$
Thermal Resistance Junction to Lead	$**R_{th(j-L)}$	TYP28					$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_j$	- 65 to +125			- 65 to +150		$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to +150					$^\circ\text{C}$

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

\*\* Mounted on P.C.B with "0.2 x 0.2 "( 5.0 x 5.0mm ) Copper Pads

SS12\_SS16Rev190105E

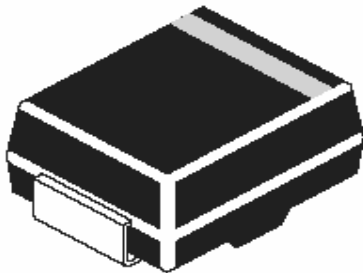
DO-214AC (SMA) SMD Plastic Package



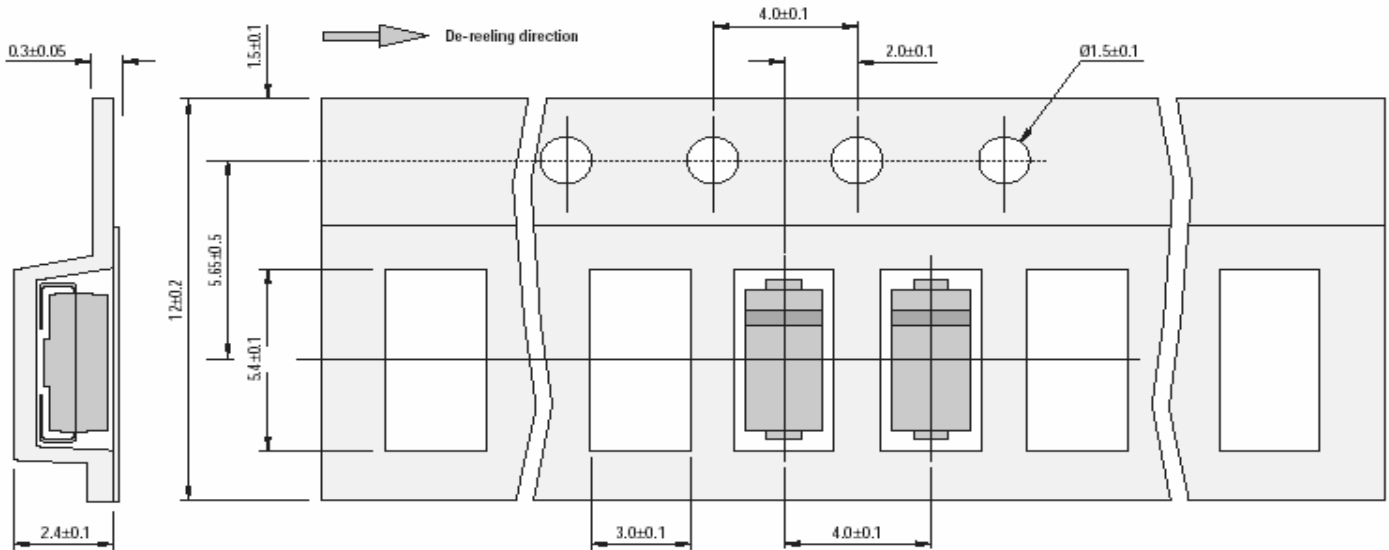
DIM	Min	Max
A	4.06	4.57
B	2.18	2.79
C	1.29	1.70
D	0.152	0.305

DIM	Min	Max
E	1.70	2.31
F	0.89	1.50
G	0.102	0.203
H	4.70	5.31

All Dimensions are in mm



SMA Packaging Tape



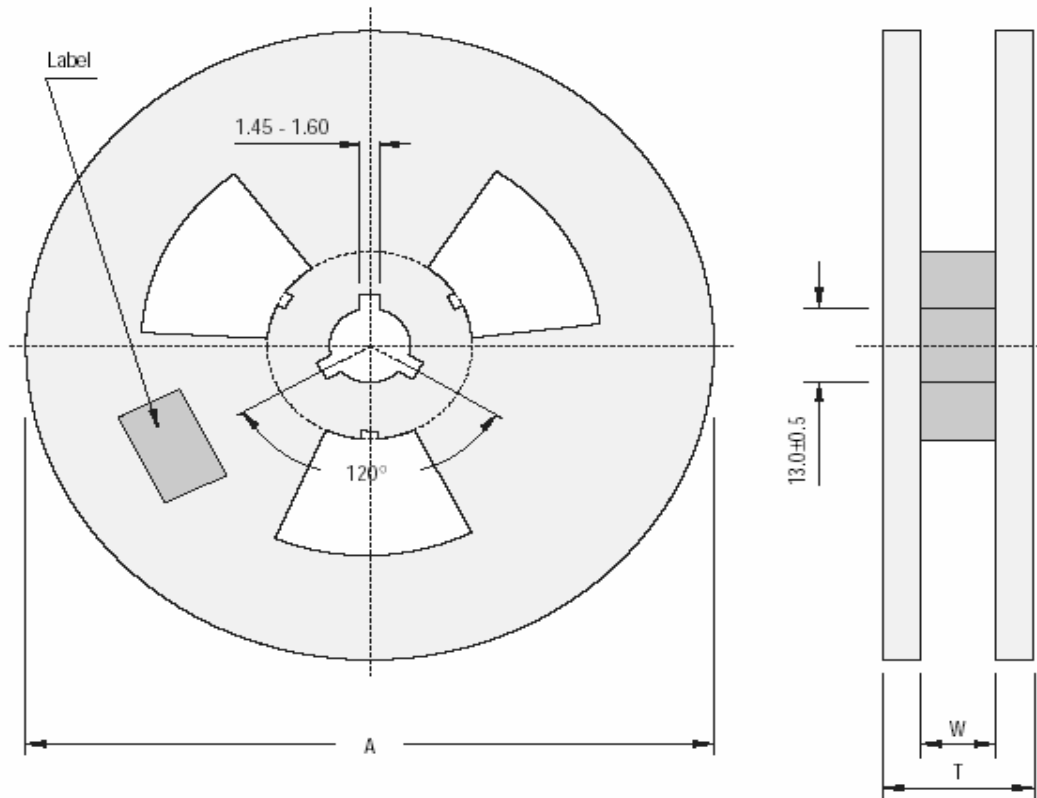
All Dimensions are in mm

Packaging Information

Package/ Case Type	Packaging Type	Std. Packing		Inner Carton		Outer Carton		
		Qty	Qty	Size L x W x H (cm)	Gross Weight (Kg)	Qty	Size L x W x H (cm)	Gross Weight (Kg)
DO-214AC (SMA)	T&R	5,000				50K	46 x 38 x 22	7.9

T & R: Tape and Reel

Reel Dimensions and Components/Reel for SMD Package



Reel Specifications

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

All Dimensions are in mm

Components Disposal Instructions

1. CDIL Semiconductor Devices are non-recyclable RoHS free material, 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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