

## Continental Device India Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



## 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 <sub>L</sub> =75°C	I <sub>(AV)</sub>	1.0			А		
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	40				А	
Maximum Instantaneous Forward Voltage @ I <sub>F</sub> =1.0A	*V <sub>F</sub>	0.5 0.75			V		
Maximum DC Reverse Current T <sub>a</sub> =25°C	*1	0.5			mA		
@ Rated DC Blocking Voltage T <sub>a</sub> =100°C	*I <sub>R</sub>	10				mA	
Thermal Resistance Junction to Ambient	**R <sub>th (j-a)</sub>	TYP88			ºC/W		
Thermal Resistance Junction to Lead	**R <sub>th (J-L)</sub>	TYP28			<sup>o</sup> C/W		
Operating Junction Temperature Range	T <sub>j</sub>	- 65 to +125 - 65 to +150		ōC			
Storage Temperature Range	T <sub>stg</sub>	- 65 to +150			ºC		

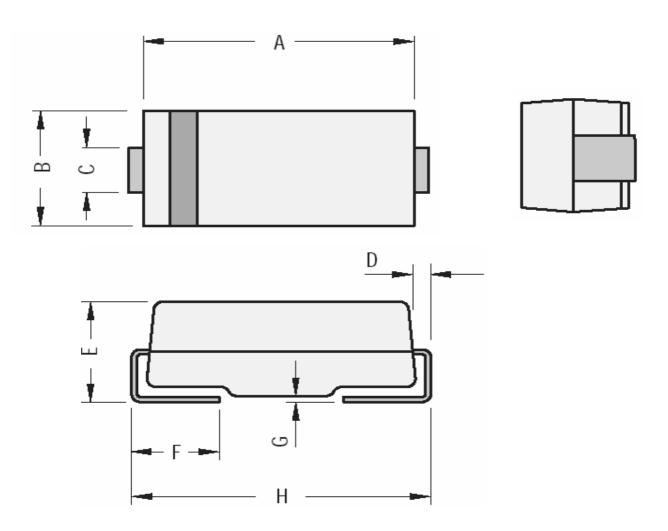
<sup>\*</sup> Pulse Width=300µs, 1% Duty Cycle.

SS12\_SS16Rev190105E

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

# DO-214AC (SMA) Surface Mount Package

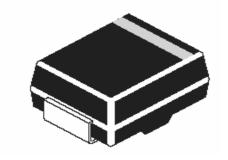
# DO-214AC (SMA) SMD Plastic Package



DIM	Min	Max
Α	4.06	4.57
В	2.18	2.79
С	1.29	1.70
D	0.152	0.305

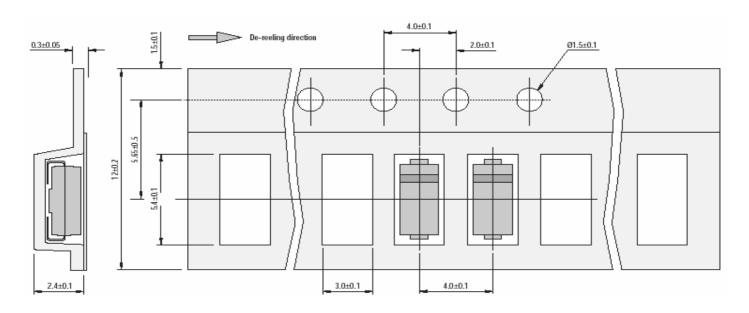
DIM	Min	Max
Е	1.70	2.31
F	0.89	1.50
G	0.102	0.203
Н	4.70	5.31

## All Dimensions are in mm



# DO-214AC (SMA) Surface Mount Package

# **SMA Packaging Tape**



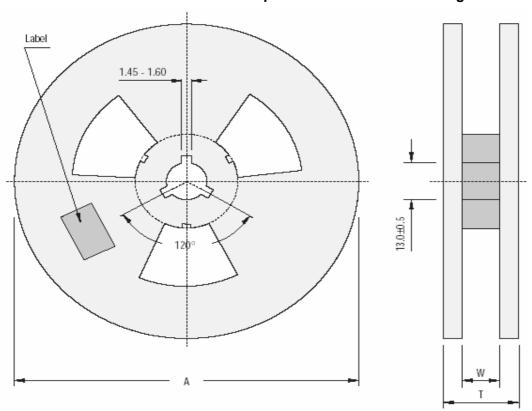
#### All Dimensions are in mm

# **Packaging Information**

Package/	Packaging Type	Std. Packing	Inner Carton			Outer Carton		
Case Type		Qty	Qty	Size L x W x H	Gross Weight	Qty	Size L x W x H	Gross Weight
				(cm)	(Kg)		(cm)	(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							
	Tape	Reel Dia.	Inside	Reel			
Package	Width		Thickness	Thickness			
		A - Max	W	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**

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