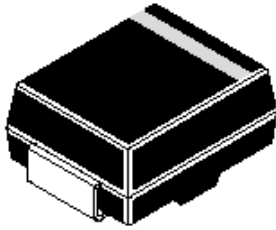


**SURFACE MOUNT FAST RECOVERY RECTIFIER**

**RS1A - RS1M**



**DO214-AC  
Surface Mount Package**

**Fast Recovery Times for High Efficiency**

**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)**

DESCRIPTION	SYMBOL	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	UNIT
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Average Forward Rectified Current @ T <sub>L</sub> =90°C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	30							A
Forward Voltage @ 1.0A	V <sub>F</sub>	1.3							V
DC Reverse Current T <sub>a</sub> =25°C	I <sub>R</sub>	5.0							μA
@ Rated DC Blocking Voltage T <sub>a</sub> =125°C		150							μA
Junction Capacitance (Note1)	C <sub>j</sub>	typ 12							pF
Thermal Resistance (Note2)	R <sub>th (J-L)</sub>	typ 32							°C/W
Reverse Recovery Time (Note3)	T <sub>RR</sub>	150				250	500		ns
Operating Junction Temperature Range	T <sub>j</sub>	- 55 to +150							°C
Storage Temperature Range	T <sub>stg</sub>	- 55 to +150							°C

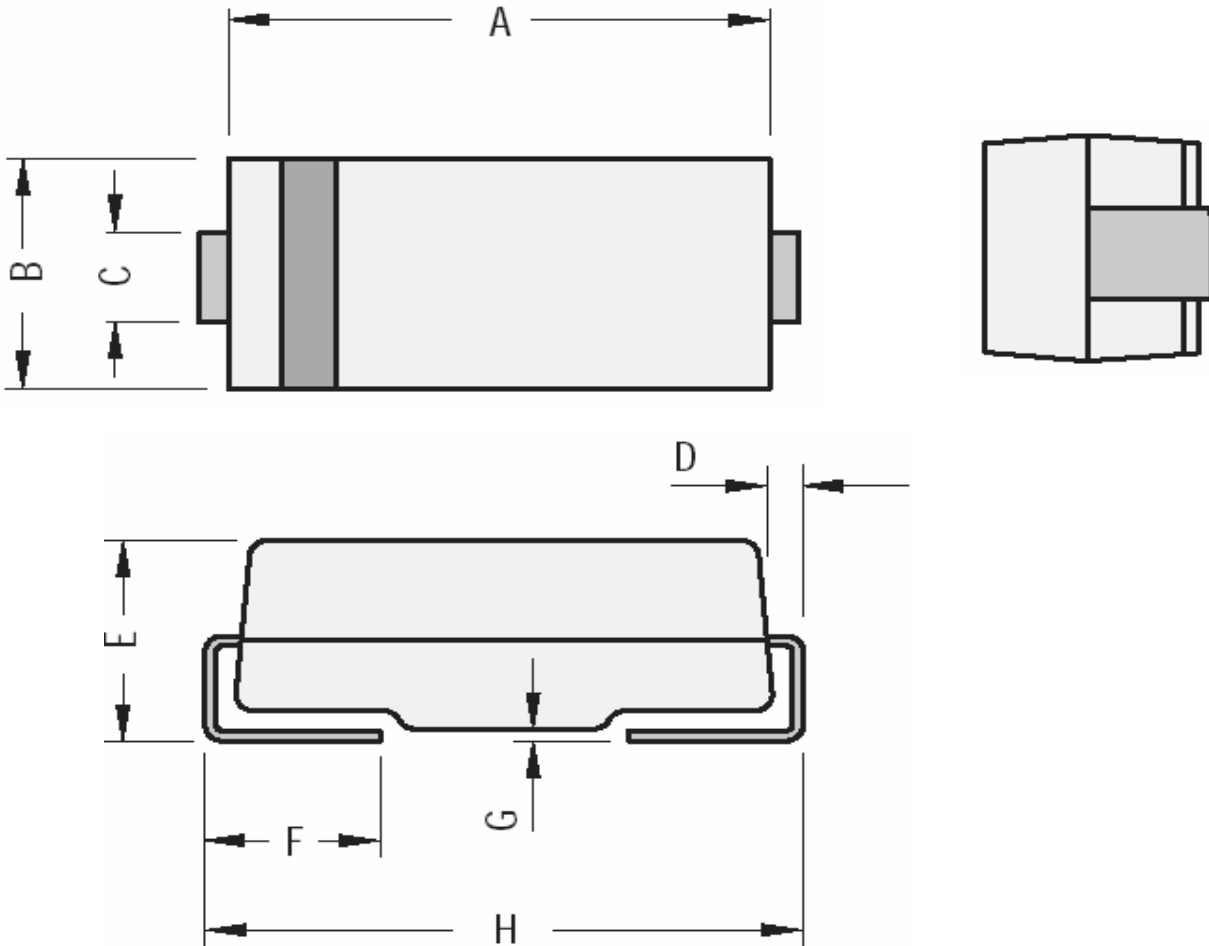
Notes 1. Measured @ 1MHz and Applied Reverse Voltage of 4.0V

2. Thermal Resistance from Junction to Lead Mounted on P.C.B. with 0.3" x 0.3" (8 x 8mm) Copper Pad Areas

3. Reverse Recovery Test Conditions : I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A

RS1A\_RS1M Rev030105E

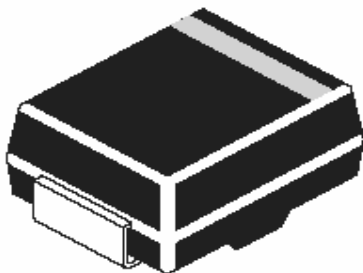
DO-214AC (SMA) SMD Plastic Package



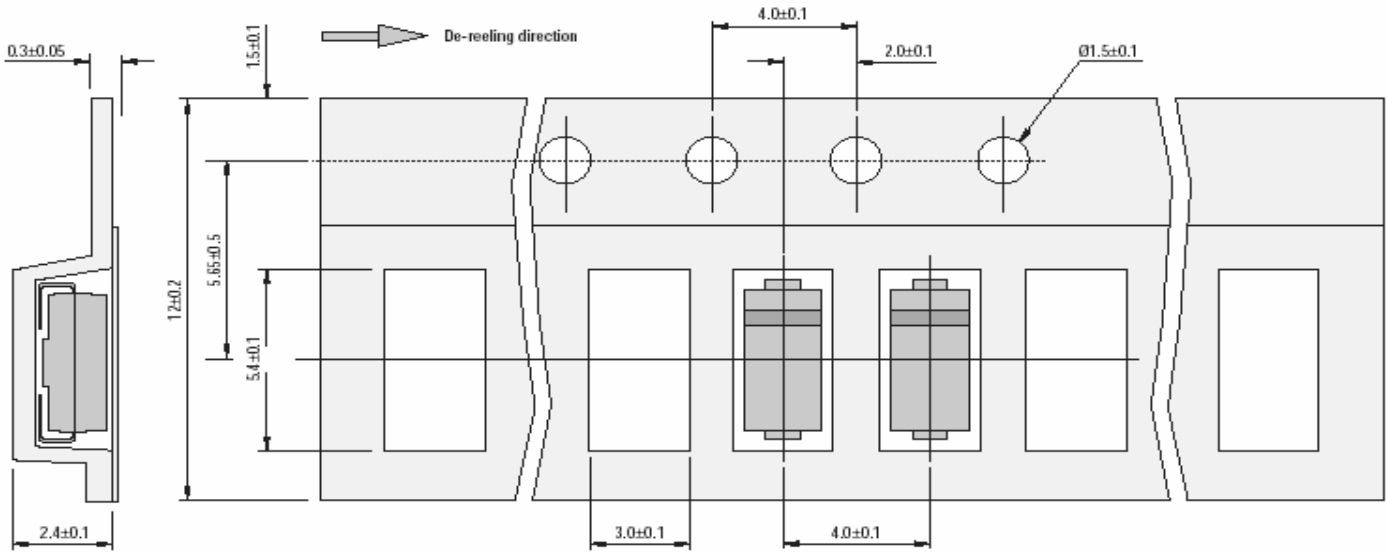
DIM	Min	Max
A	4.06	4.57
B	2.18	2.79
C	1.29	1.70
D	0.152	0.305

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



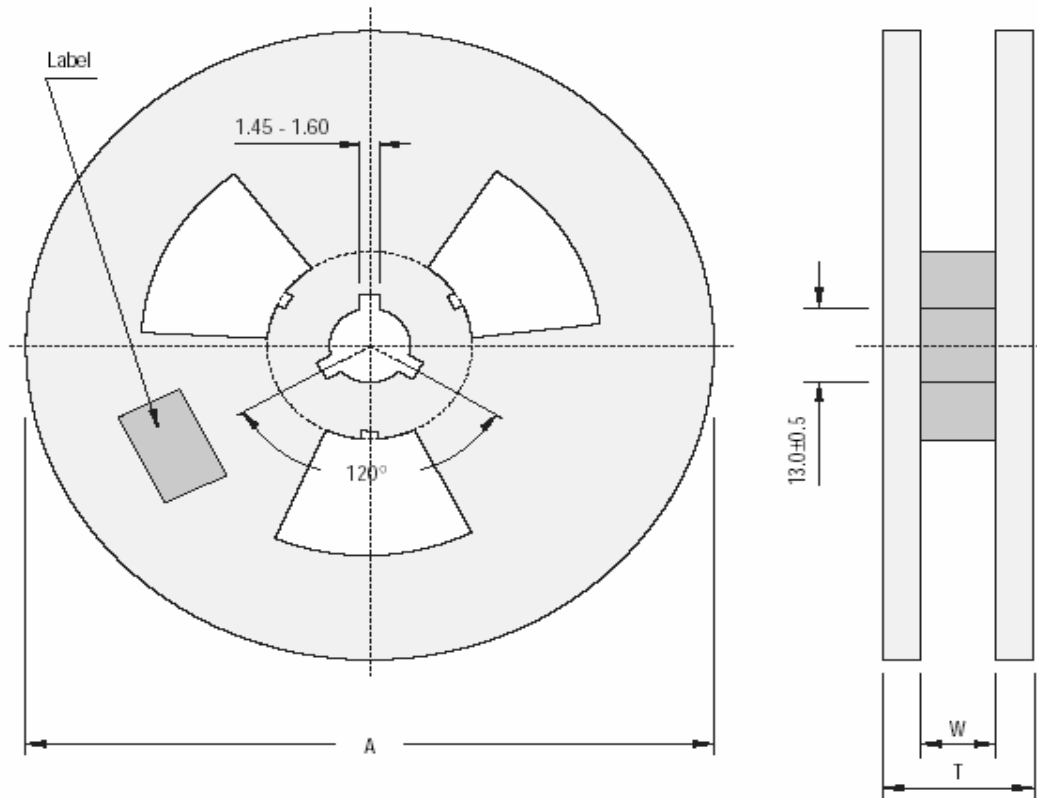
All Dimensions are in mm

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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