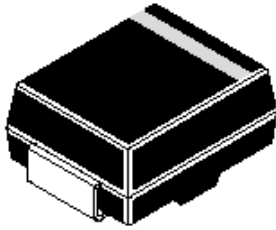


SURFACE MOUNT FAST RECOVERY RECTIFIER

RS1A - RS1M



**DO214-AC
Surface Mount Package**

Fast Recovery Times for High Efficiency

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

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

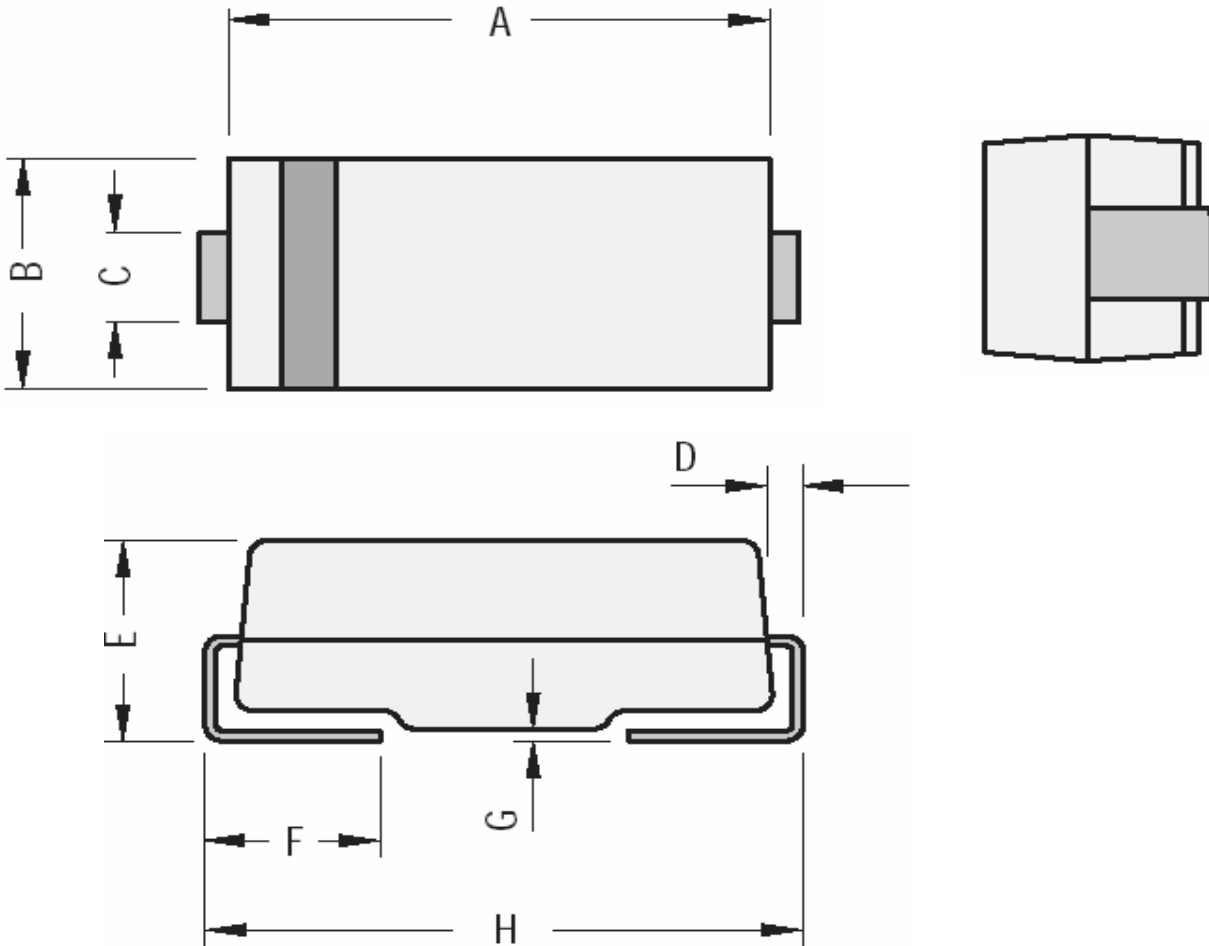
Notes 1. Measured @ 1MHz and Applied Reverse Voltage of 4.0V

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_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A

RS1A_RS1M Rev030105E

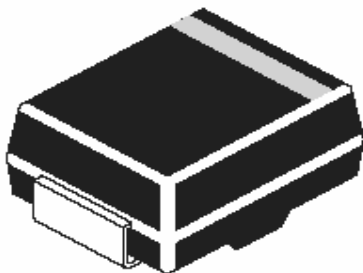
DO-214AC (SMA) SMD Plastic Package



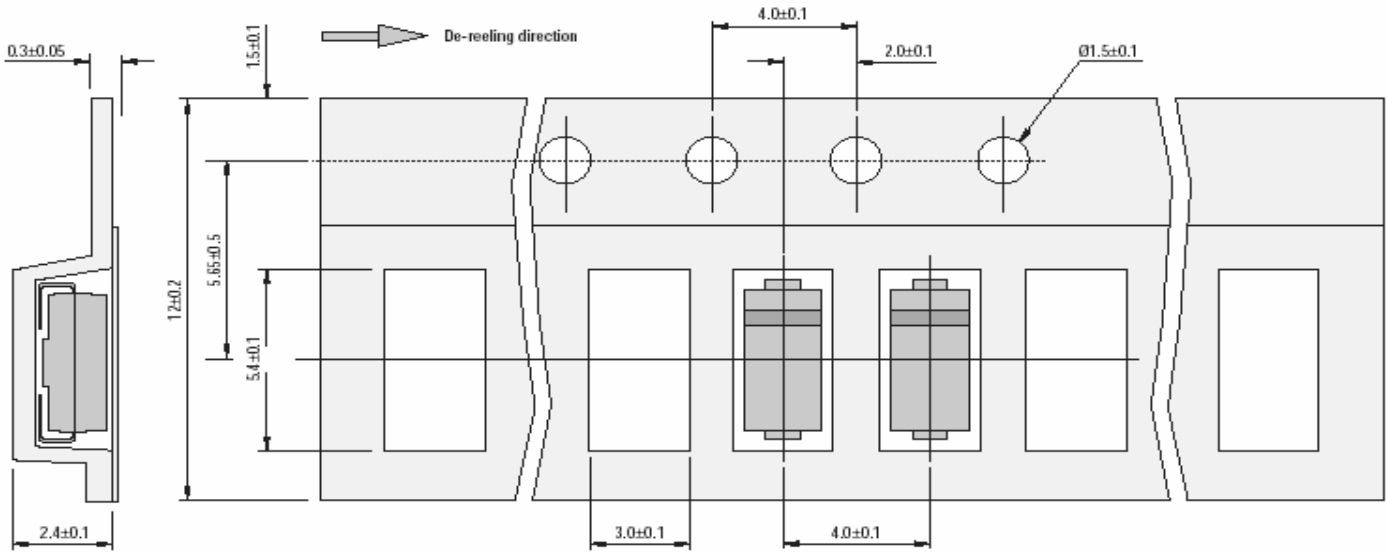
| DIM | Min | Max |
|-----|-------|-------|
| A | 4.06 | 4.57 |
| B | 2.18 | 2.79 |
| C | 1.29 | 1.70 |
| D | 0.152 | 0.305 |

| 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



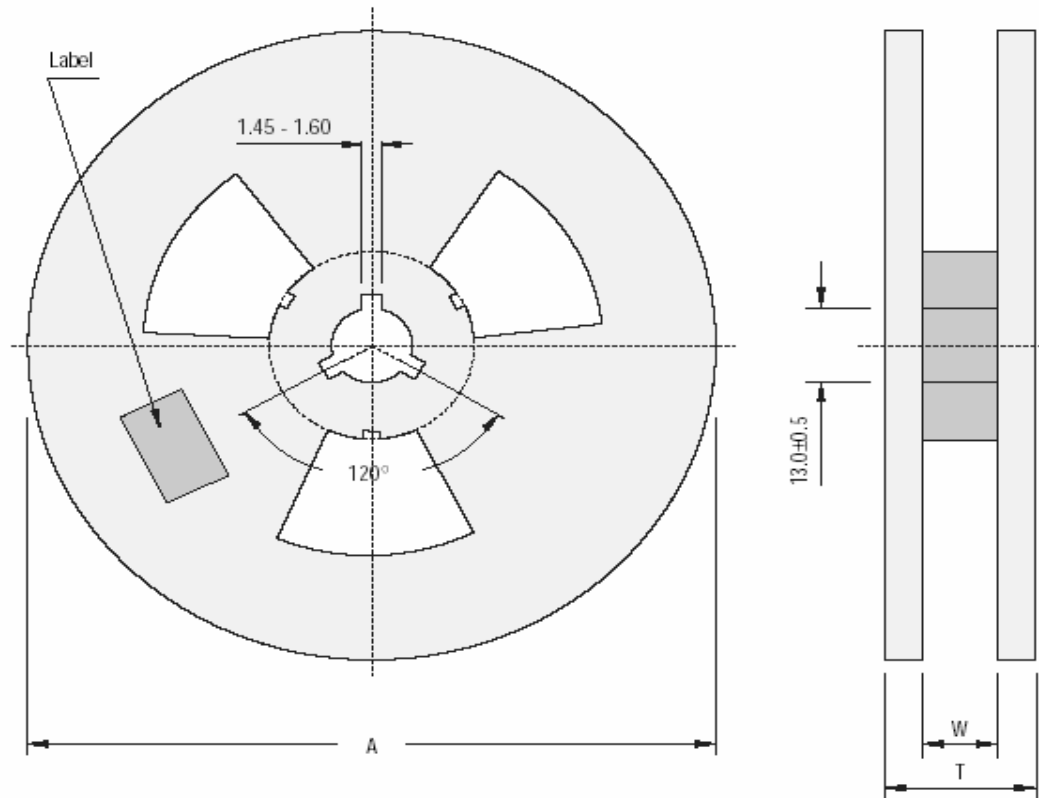
All Dimensions are in mm

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).

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