

Continental Device India Limited An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company





SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SS32 - S300

DO-214AA (SMB) Surface Mount Package



Polarity : Colour band denotes cathode end

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless specified otherwise. Resistive or Inductive Load.

| DESCRIPTION | SYMBOL | SS32 | SS33 | SS34 | SS35 | SS36 | SS38 | SS39 | S300 | 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°C | I _(AV) | | | | 3 | 3.0 | | | | А |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 80 | | | | | A | | | |
| Maximum Instantaneous Forward Voltage at I _F =3.0A | *V _F | | 0.50 | | 0. | 70 | | 0.85 | | V |
| Maximum DC Reverse Current T _a =25°C | *I _R | | | | (|).5 | - | | | mA |
| at Rated DC Blocking Voltage T _a =100°C | 'R | 20 | | | | | mA | | | |
| Thermal Resistance Junction to Ambient | **R _{th (j-a)} | TYP55 | | | | | | °C/W | | |
| **R _{th (j-a)} TYP17 | | | | | | | °C/W | | | |
| Operating Junction Temperature Range | Tj | - 55 to +125 | | | ٥C | | | | | |
| Storage Temperature Range | T _{stg} | - 55 to +150 | | | ٥C | | | | | |

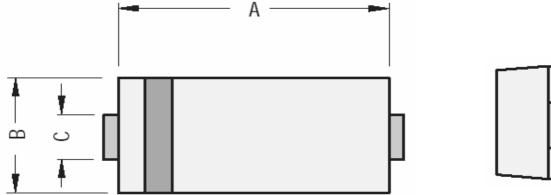
* Pulse Test With PW=300ms, 1% Duty Cycle.

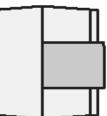
** Mounted on PCB with 0.30" x 0.30" (8.0 x 8.0 mm) Copper Pad Area

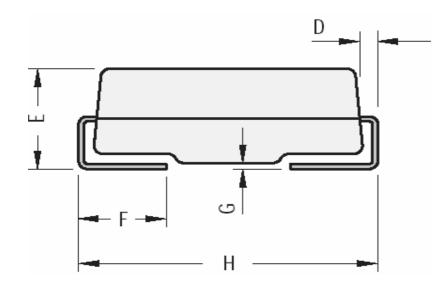
SS32_S300Rev290405E

DO-214AA (SMB) Surface Mount Package

DO-214AA (SMB) SMD Plastic Package



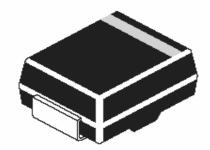




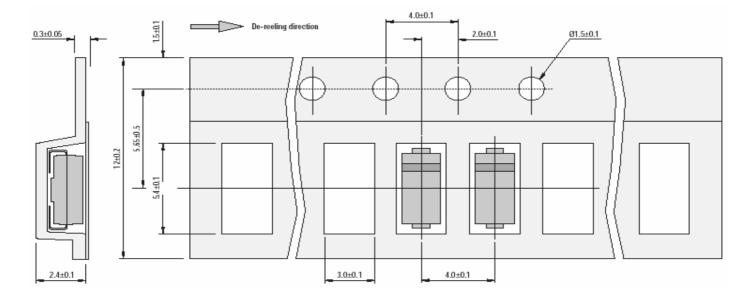
| DIM | Min | Max |
|-----|-------|-------|
| A | 4.06 | 4.57 |
| В | 3.30 | 3.94 |
| С | 1.96 | 2.11 |
| D | 0.152 | 0.305 |

| DIM | Min | Мах |
|----------|-------|------|
| F | 2.13 | 2.44 |
| E | 0.76 | 1.52 |
| G | 0.102 | |
| <u> </u> | | |
| н | 5.21 | 5.59 |

All Dimensions are in mm



DO-214AA (SMB) Surface Mount Package



SMB Packing Tape

All Dimensions are in mm

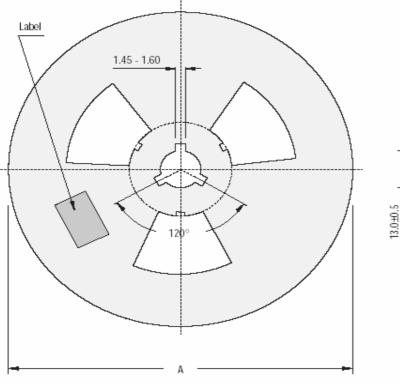
Packaging Information

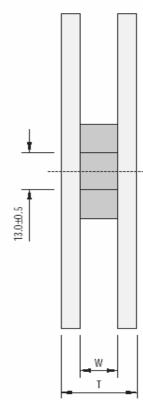
| Package/ | Packaging Type | Std. Packing | Inner Carton | | | Outer Carton | | |
|----------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|
| Case Type | | Qty | Qty | Size L x W x H | Gross Weight | Qty | Size L x W x H | Gross Weight |
| | | | | (cm) | (Kg) | | (cm) | (Kg) |
| DO-214AA (SMB) | T&R | 5,000 | | | | 50K | 46 x 38 x 22 | 8.9 |

T & R: Tape and Reel

SS32 - S300 DO-214AA (SMB) Surface Mount Package

Reel Dimensions for SMD Package





| Reel Specifications | | | | | | | | |
|---------------------|-------|-----------|-----------|-----------|--|--|--|--|
| | Tape | Reel Dia. | Inside | Reel | | | | |
| Package | Width | | Thickness | Thickness | | | | |
| | | A - Max | W | 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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