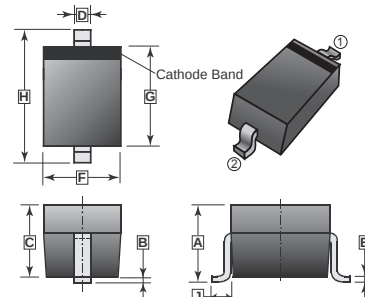


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## DESCRIPTION

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

## SOD-323



## MARKING

T6 or T4

| REF. | Millimeter |      | REF. | Millimeter |       |
|------|------------|------|------|------------|-------|
|      | Min.       | Max. |      | Min.       | Max.  |
| A    | 1.05 REF.  |      | E    | 0.080      | 0.180 |
| B    | 0.20 REF.  |      | F    | 1.15       | 1.45  |
| C    | 0.80       | 1.00 | G    | 1.60       | 1.80  |
| D    | 0.25       | 0.40 | H    | 2.30       | 2.70  |

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Single Diode @ T<sub>A</sub> = 25°C)

| Parameter                                    | Symbol                            | Ratings         | Unit   |
|----------------------------------------------|-----------------------------------|-----------------|--------|
| Non-Repetitive Peak Reverse Voltage          | V <sub>RM</sub>                   | 100             | V      |
| Peak Repetitive Peak Reverse Voltage         | V <sub>RRM</sub>                  | 75              | V      |
| Working Peak Reverse Voltage                 | V <sub>RWM</sub>                  |                 |        |
| DC Blocking Voltage                          | V <sub>R</sub>                    |                 |        |
| RMS Reverse Voltage                          | V <sub>R(RMS)</sub>               | 53              | V      |
| Forward Continuous Current                   | I <sub>FM</sub>                   | 300             | mA     |
| Average Rectified Output Current             | I <sub>O</sub>                    | 150             | mA     |
| Peak Forward Surge Current @=1.0μs<br>@=1.0s | I <sub>FSM</sub>                  | 2.0             | A      |
|                                              |                                   | 1.0             |        |
| Power Dissipation                            | P <sub>D</sub>                    | 200             | mW     |
| Thermal Resistance Junction to Ambient       | R <sub>θJA</sub>                  | 625             | °C / W |
| Junction, Storage Temperature                | T <sub>J</sub> , T <sub>STG</sub> | 125, -65 ~ +150 | °C     |

## ELECTRICAL CHARACTERISTICS (at T<sub>A</sub> = 25°C unless otherwise specified)

| Parameters                      | Symbol          | Min. | Typ. | Max.  | Unit | Test Conditions                                                                                        |
|---------------------------------|-----------------|------|------|-------|------|--------------------------------------------------------------------------------------------------------|
| Forward Voltage                 | V <sub>F1</sub> | -    | -    | 0.715 | V    | I <sub>F</sub> = 1mA                                                                                   |
|                                 | V <sub>F2</sub> | -    | -    | 0.855 |      | I <sub>F</sub> = 10mA                                                                                  |
|                                 | V <sub>F3</sub> | -    | -    | 1.0   |      | I <sub>F</sub> = 50mA                                                                                  |
|                                 | V <sub>F4</sub> | -    | -    | 1.25  |      | I <sub>F</sub> = 150mA                                                                                 |
| Reverse Voltage Leakage Current | I <sub>R</sub>  | -    | -    | 1     | μA   | V <sub>R</sub> = 75V                                                                                   |
|                                 |                 | -    | -    | 25    | nA   | V <sub>R</sub> = 20V                                                                                   |
| Capacitance between terminals   | C <sub>T</sub>  | -    | -    | 2     | pF   | V <sub>R</sub> = 0V, f=1MHz                                                                            |
| Reverse Recovery Time           | t <sub>RR</sub> | -    | -    | 4     | nS   | I <sub>F</sub> = I <sub>R</sub> = 10 mA,<br>I <sub>RR</sub> =0.1xI <sub>R</sub> , R <sub>L</sub> =100Ω |

## RATINGS AND CHARACTERISTIC CURVES

