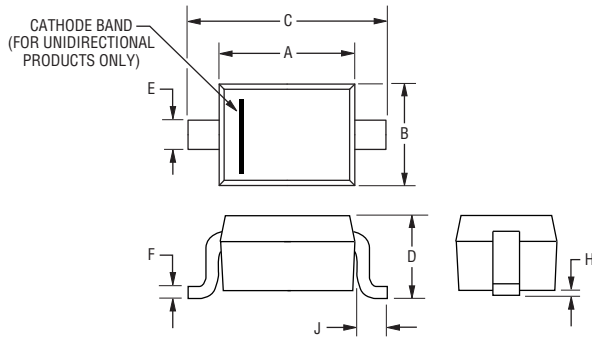


## CDSOD323-TxxC - TVS Diode Array Series

**BOURNS®**

### Product Dimensions

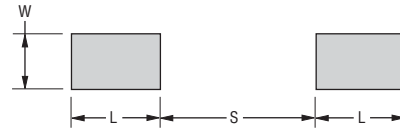
This is an RoHS compliant molded JEDEC SOD-323 package with 100 % Sn plating on the terminations. It weighs approximately 30 mg and has a flammability rating of UL 94V-0.



| Dimensions |                                       |
|------------|---------------------------------------|
| A          | $\frac{1.60 - 1.90}{(0.063 - 0.075)}$ |
| B          | $\frac{1.15 - 1.45}{(0.045 - 0.057)}$ |
| C          | $\frac{2.39 - 2.70}{(0.094 - 0.106)}$ |
| D          | $\frac{0.92 - 1.14}{(0.036 - 0.045)}$ |
| E          | $\frac{0.25 - 0.40}{(0.010 - 0.016)}$ |
| F          | $\frac{0.08 - 0.20}{(0.003 - 0.008)}$ |
| H          | $\frac{0.13}{(0.005)} \text{ MAX.}$   |
| J          | $\frac{0.30 - 0.45}{(0.012 - 0.018)}$ |

DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

### Recommended Footprint



| Dimensions (Nominal) |                        |
|----------------------|------------------------|
| L                    | $\frac{0.80}{(0.031)}$ |
| S                    | $\frac{1.40}{(0.055)}$ |
| W                    | $\frac{0.50}{(0.020)}$ |

DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

### Typical Part Marking

Each device has device marking outlined below and the unidirectional devices have an additional Polarity Band indicating the cathode.

|               |         |
|---------------|---------|
| CDSOD323-T03  | .....3  |
| CDSOD323-T03C | .....3C |
| CDSOD323-T05  | .....5  |
| CDSOD323-T05C | .....5C |
| CDSOD323-T08  | .....8  |
| CDSOD323-T08C | .....8C |
| CDSOD323-T12  | .....2  |
| CDSOD323-T12C | .....2C |
| CDSOD323-T15  | .....6  |
| CDSOD323-T15C | .....6C |
| CDSOD323-T18  | .....1  |
| CDSOD323-T18C | .....1C |
| CDSOD323-T24  | .....4  |
| CDSOD323-T24C | .....4C |

### Environmental Specifications

|                            |         |
|----------------------------|---------|
| Moisture Sensitivity Level | .....1  |
| ESD Classification (HBM)   | .....3B |

Specifications are subject to change without notice.

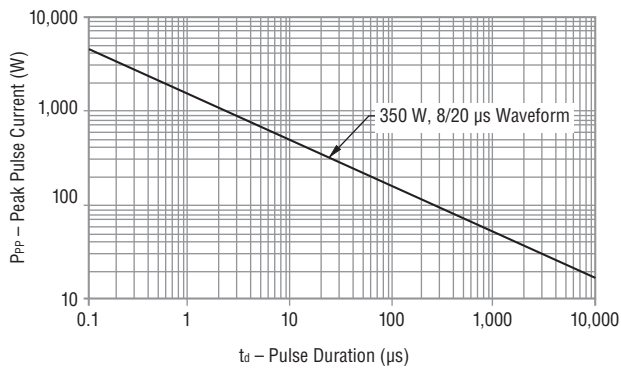
Users should verify actual device performance in their specific applications.

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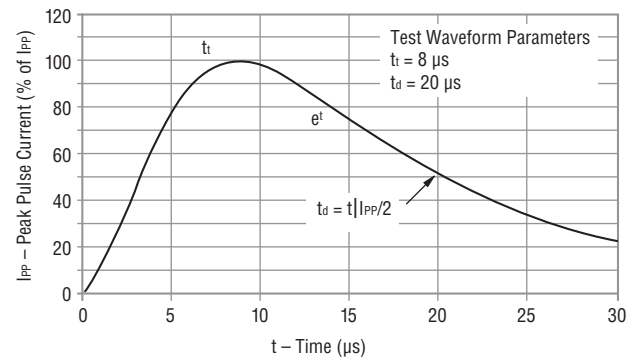
# CDSOD323-TxxC - TVS Diode Array Series

## Performance Graphs

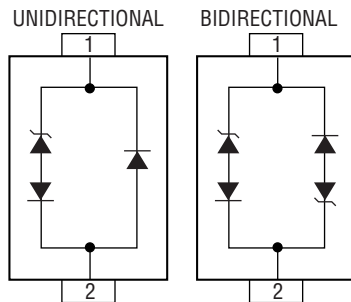
### Peak Pulse Power vs Pulse Time



### Pulse Waveform



## Block Diagram



## How to Order

**CD SOD323 - T 05 C**

Common Code \_\_\_\_\_  
 Chip Diode \_\_\_\_\_  
 Package \_\_\_\_\_  
 SOD323 = SOD-323 Package  
 Model \_\_\_\_\_  
 T = Transient Voltage Suppressor  
 Working Peak Reverse Voltage \_\_\_\_\_  
 05 = 5  $V_{WM}$  (Volts)  
 Suffix \_\_\_\_\_  
 C = Bidirectional Diode

Specifications are subject to change without notice.

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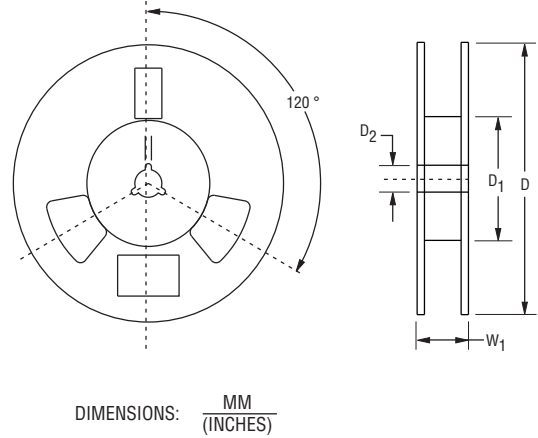
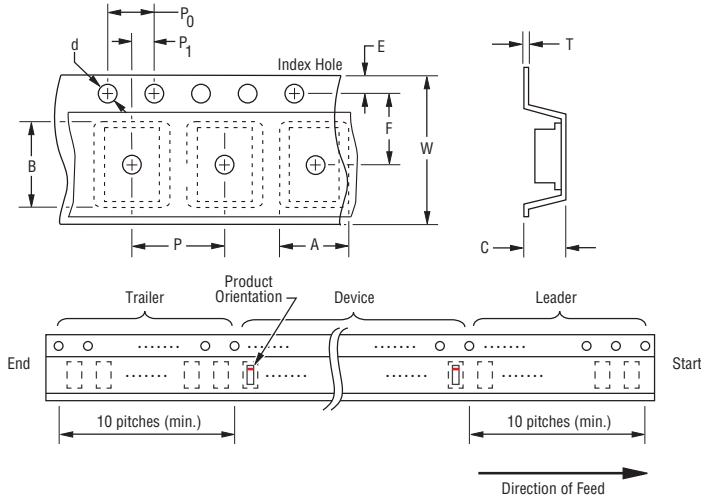
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# CDSOD323-TxxC - TVS Diode Array Series

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## Packaging Information

The product is packaged in tape and reel format per EIA-481 standard.



| Item                   | Symbol         | SOD-323                                   |
|------------------------|----------------|-------------------------------------------|
| Carrier Width          | A              | $\frac{1.55 \pm 0.10}{(0.061 \pm 0.004)}$ |
| Carrier Length         | B              | $\frac{2.90 \pm 0.10}{(0.114 \pm 0.004)}$ |
| Carrier Depth          | C              | $\frac{1.35 \pm 0.10}{(0.053 \pm 0.004)}$ |
| Sprocket Hole          | d              | $\frac{1.55 \pm 0.05}{(0.061 \pm 0.002)}$ |
| Reel Outside Diameter  | D              | $\frac{178}{(7.008)}$                     |
| Reel Inner Diameter    | D <sub>1</sub> | $\frac{80.0}{(3.150)} \text{ MIN.}$       |
| Feed Hole Diameter     | D <sub>2</sub> | $\frac{13.0 \pm 0.20}{(0.512 \pm 0.008)}$ |
| Sprocket Hole Position | E              | $\frac{1.75 \pm 0.10}{(0.069 \pm 0.004)}$ |
| Punch Hole Position    | F              | $\frac{3.50 \pm 0.05}{(0.138 \pm 0.002)}$ |
| Punch Hole Pitch       | P              | $\frac{4.00 \pm 0.10}{(0.157 \pm 0.004)}$ |
| Sprocket Hole Pitch    | P <sub>0</sub> | $\frac{4.00 \pm 0.10}{(0.157 \pm 0.004)}$ |
| Embossment Center      | P <sub>1</sub> | $\frac{2.00 \pm 0.05}{(0.079 \pm 0.002)}$ |
| Overall Tape Thickness | T              | $\frac{0.20 \pm 0.10}{(0.008 \pm 0.004)}$ |
| Tape Width             | W              | $\frac{8.00 \pm 0.20}{(0.315 \pm 0.008)}$ |
| Reel Width             | W <sub>1</sub> | $\frac{13.5}{(0.531)} \text{ MAX.}$       |
| Quantity per Reel      | --             | 3000                                      |

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