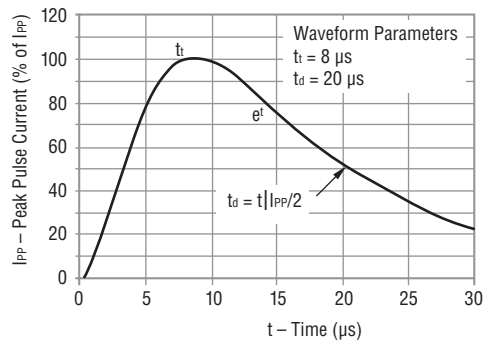


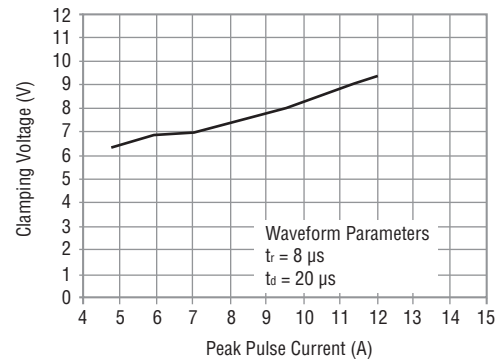
# CD143A-SR2.8~3.3 - Steering/TVS Diode Array Series

## Typical Characteristics

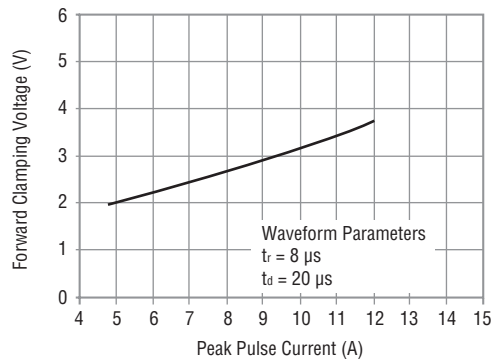
### Pulse Wave Form



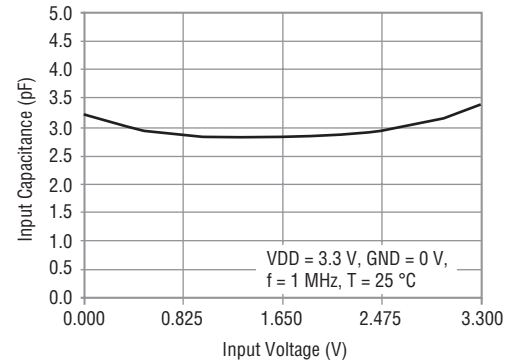
### Clamping Voltage vs. Peak Pulse Current



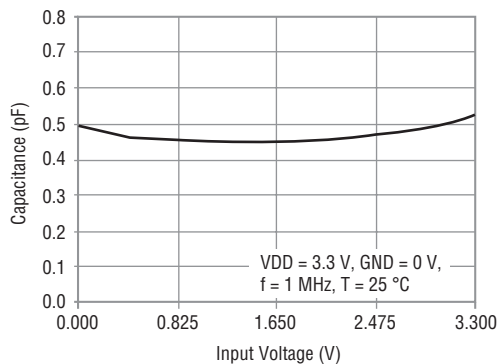
### Forward Clamping Voltage vs. Peak Pulse Current



### Typical Variation of $C_{IN}$ vs. $V_{IN}$



### Typical Variation of $C_{I/O-to-I/O}$ vs. $V_{IN}$



### How to Order

**CD 143A - SR 3.3 C**

Common Code \_\_\_\_\_  
 Chip Diode \_\_\_\_\_  
 Package \_\_\_\_\_  
 143A = SOT-143 \_\_\_\_\_  
 Model \_\_\_\_\_  
 SR = Steering Diode Array \_\_\_\_\_  
 Repetitive Peak Reverse Voltage \_\_\_\_\_  
 3.3 = 3.3  $V_{RWM}$  (Volts) \_\_\_\_\_  
 Customer Specific Requirements \_\_\_\_\_

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

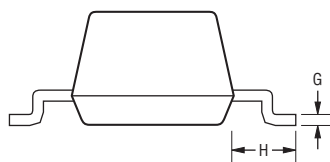
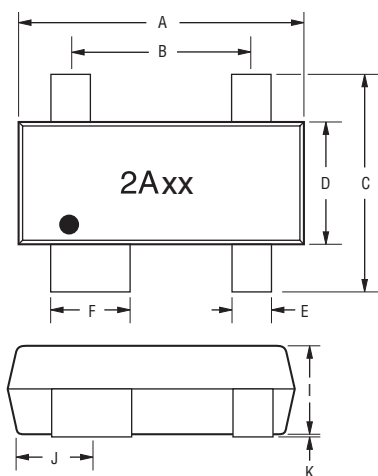
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# CD143A-SR2.8~3.3 - Steering/TVS Diode Array Series

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## Product Dimensions

This is a molded device. It weighs approximately 35 mg and has a flammability rating of UL 94V-0. The dimensions for the packaged device are shown below.

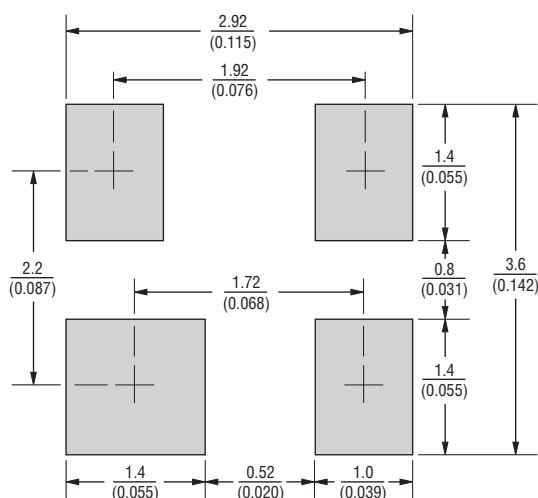


DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

| Dimensions |                                       |
|------------|---------------------------------------|
| A          | $\frac{2.80 - 3.04}{(0.110 - 0.12)}$  |
| B          | $\frac{1.80 - 2.02}{(0.071 - 0.080)}$ |
| C          | $\frac{2.25 - 2.55}{(0.089 - 0.100)}$ |
| D          | $\frac{1.2 - 1.4}{(0.047 - 0.055)}$   |
| E          | $\frac{0.35 - 0.50}{(0.014 - 0.020)}$ |
| F          | $\frac{0.76 - 0.89}{(0.030 - 0.035)}$ |
| G          | $\frac{0.09 - 0.18}{(0.035 - 0.007)}$ |
| H          | $\frac{0.46 - 0.60}{(0.018 - 0.024)}$ |
| I          | $\frac{0.9 - 1.1}{(0.035 - 0.043)}$   |
| J          | $\frac{0.72 - 0.83}{(0.028 - 0.033)}$ |
| K          | $\frac{0.05 - 0.1}{(0.002 - 0.004)}$  |

## Recommended Pad Layout

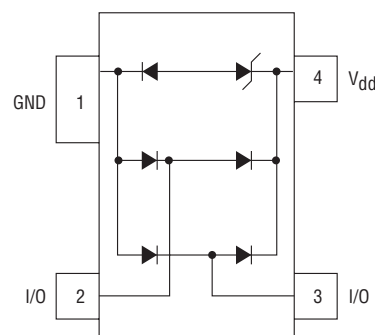
This is the footprint recommended for this SOT-143 device.



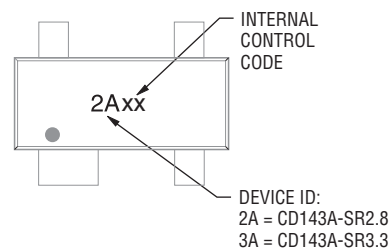
DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

## Block Diagram

The device block diagram below includes the pin names and basic electrical connections associated with each channel.



## Typical Part Marking



Specifications are subject to change without notice.

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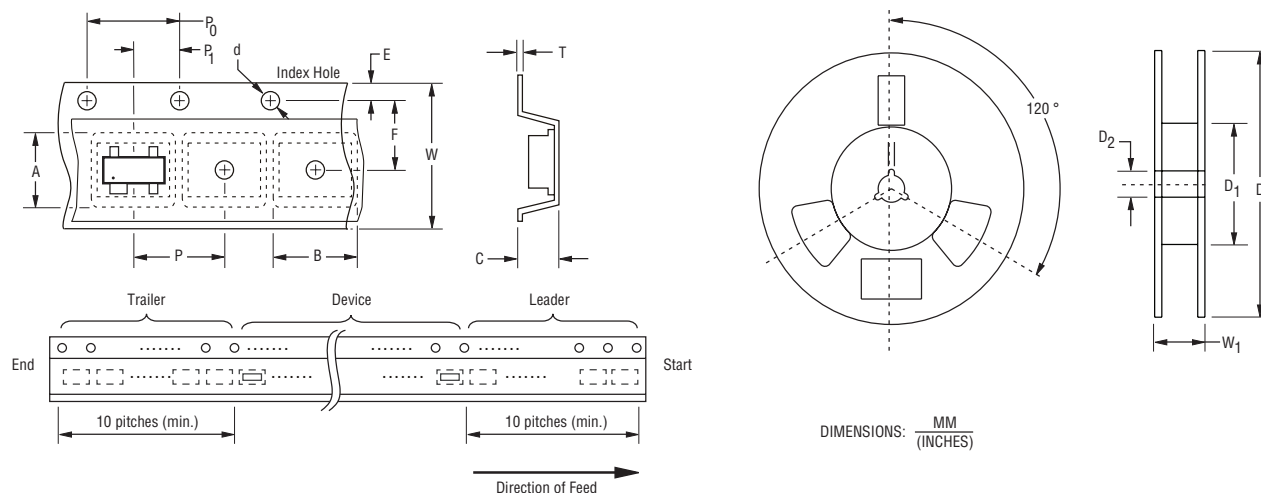
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# CD143A-SR2.8~3.3 - Steering/TVS Diode Array Series

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## Packaging Information

The surface mount product is packaged in an 8 mm x 4 mm tape and reel format per EIA-481 standard.



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

| Item                   | Symbol         | SOT-143                                        |
|------------------------|----------------|------------------------------------------------|
| Carrier Width          | A              | $\frac{3.19 \pm 0.10}{(0.126 \pm 0.004)}$      |
| Carrier Length         | B              | $\frac{2.8 \pm 0.10}{(0.110 \pm 0.004)}$       |
| Carrier Depth          | C              | $\frac{1.31 \pm 0.10}{(0.052 \pm 0.004)}$      |
| Sprocket Hole          | d              | $\frac{1.5 +0.1/-0}{(0.059 +0.004/-0)}$        |
| Reel Outside Diameter  | D              | $\frac{180 \pm 3}{(7.087 \pm 0.012)}$          |
| Reel Inner Diameter    | D <sub>1</sub> | $\frac{50.0}{(1.969)} \text{ MIN.}$            |
| Feed Hole Diameter     | D <sub>2</sub> | $\frac{13.0 +0.5/-0.2}{(0.512 +0.020/-0.008)}$ |
| 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              | $\frac{0.6}{(0.024)} \text{ MAX.}$             |
| Tape Width             | W              | $\frac{8.3}{(0.327)} \text{ MAX.}$             |
| Reel Width             | W <sub>1</sub> | $\frac{14.4}{(0.567)} \text{ MAX.}$            |
| Quantity per Reel      | --             | 3,000                                          |

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