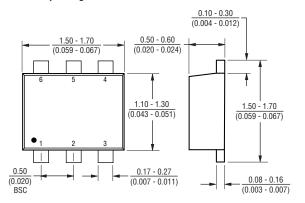
# CDS0T563-0502 - Surface Mount TVS Diode Array

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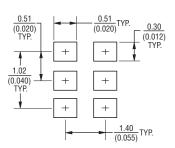
#### **Product Dimensions**

This is a molded SOT563 package with lead free 100 % Matte Sn on the lead frame. It weighs approximately 3 mg and has a flammability rating of UL 94V-0.



 $DIMENSIONS = \frac{MILLIMETERS}{(INCHES)}$ 

#### **Recommended Footprint**



#### **Typical Part Marking**

CDSOT563-0502......52XY

("X" = Date Code; "Y" = Package House)

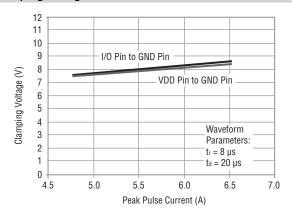
# How to Order CD SOT563 - 05 02 Common Diode Chip Diode Package SOT563 = SOT-563 Package Working Peak Reverse Voltage 05 = 5 V (Volts) Data Lines 02 = 2 Data Lines

# CDS0T563-0502 - Surface Mount TVS Diode Array

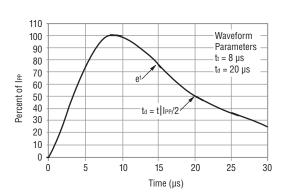
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#### **Rating & Characteristic Curves**

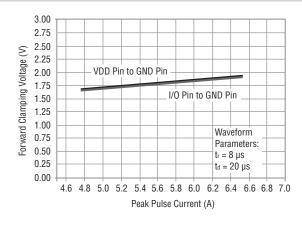
#### Clamping Voltage vs. Peak Pulse Current



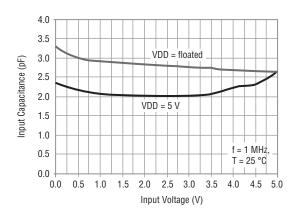
#### **Pulse Waveform**



#### Forward Clamping Voltage vs. Peak Pulse Current



#### Typical Variation of CIN vs. VIN

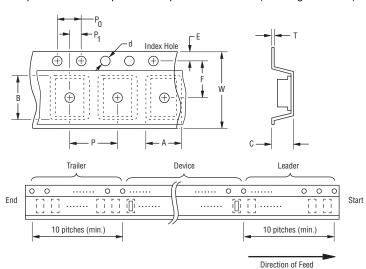


# CDS0T563-0502 - Surface Mount TVS Diode Array

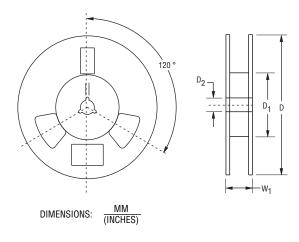
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#### **Packaging Information**

The product will be dispensed in tape and reel format (see diagram below)



| Item                   | Symbol         | SOT563                                    |
|------------------------|----------------|---|
| Carrier Width          | А              | $\frac{1.78 \pm 0.05}{(0.069 \pm 0.002)}$ |
| Carrier Length         | В              | $\frac{1.78 \pm 0.05}{(0.069 \pm 0.002)}$ |
| Carrier Depth          | С              | $\frac{0.69 \pm 0.05}{(0.027 \pm 0.002)}$ |
| Sprocket Hole          | d              | $\frac{1.55 \pm 0.05}{(0.061 \pm 0.002)}$ |
| Reel Outside Diameter  | D              | 178<br>(7.008)                            |
| Reel Inner Diameter    | D <sub>1</sub> | 50.0<br>(1.969) 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       | Р              | $\frac{4.00 \pm 0.10}{(0.157 \pm 0.004)}$ |
| 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 | Т              | $\frac{0.20 \pm 0.10}{(0.008 \pm 0.004)}$ |
| Tape Width             | W              | $\frac{8.00 \pm 0.20}{(0.315 \pm 0.008)}$ |
| Reel Width             | W <sub>1</sub> | 14.4<br>(0.567) MAX.                      |
| Quantity per Reel      |                | 3000                                      |



Devices are packed in accordance with EIA standard RS-481-A.

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#### REV. 08/19

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