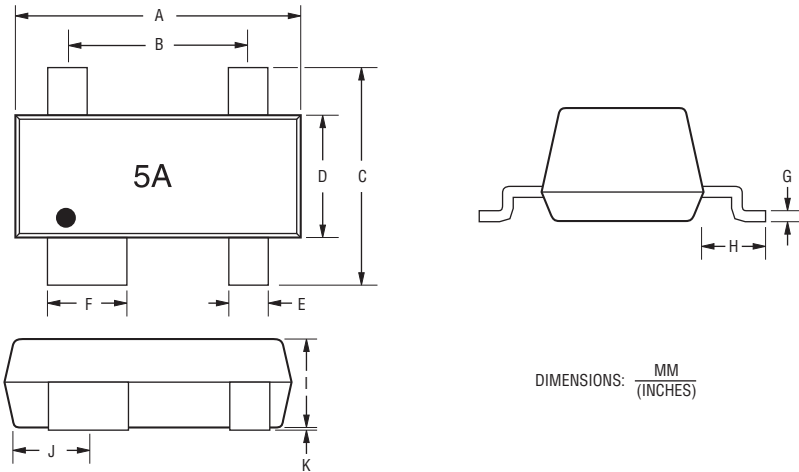


# CD143A-SR05~12 – Steering/TVS Diode Array Series



## Product Dimensions

This is a molded JEDEC SOT-143 device. It weighs approximately 35 mg and has a flammability rating of UL 94V-0. The dimensions for the packaged device are shown below.

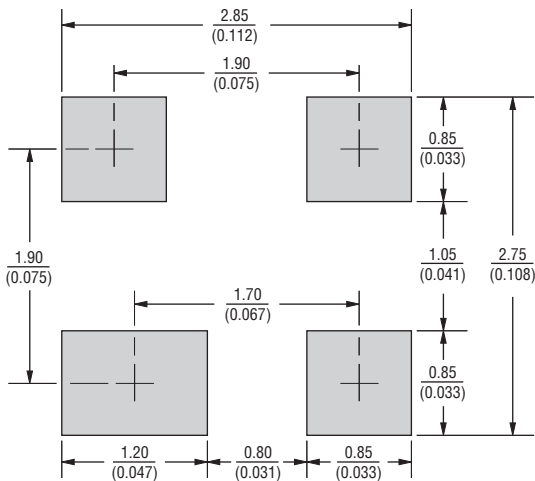


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

Dimensions	
A	$\frac{2.80 - 3.04}{(0.110 - 0.12)}$
B	$\frac{1.78 - 2.03}{(0.070 - 0.080)}$
C	$\frac{2.11 - 2.48}{(0.083 - 0.098)}$
D	$\frac{1.20 - 1.39}{(0.047 - 0.055)}$
E	$\frac{0.39 - 0.50}{(0.015 - 0.020)}$
F	$\frac{0.79 - 0.93}{(0.031 - 0.037)}$
G	$\frac{0.08 - 0.15}{(0.003 - 0.006)}$
H	$\frac{0.46 - 0.60}{(0.018 - 0.024)}$
I	$\frac{0.84 - 1.14}{(0.033 - 0.045)}$
J	$\frac{0.72 - 0.83}{(0.028 - 0.033)}$
K	$\frac{0.013 - 0.10}{(0.0005 - 0.004)}$

## Recommended Pad Layout

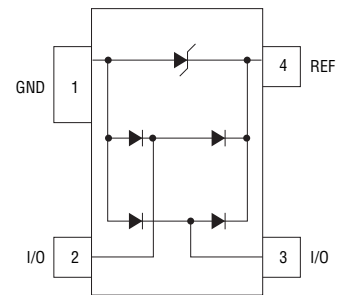
This is the footprint recommended for this SOT-143 device.



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

CD143A-SR05 .....5A  
 CD143A-SR12 .....12A

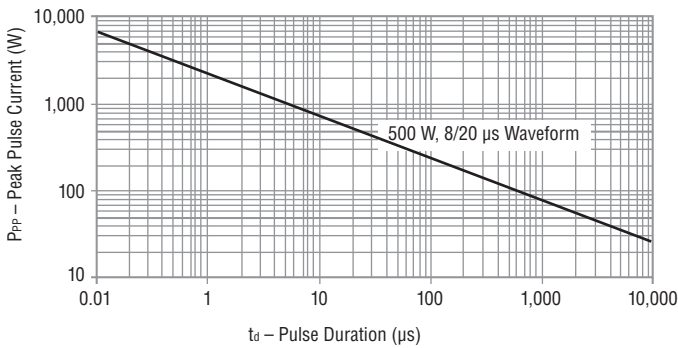
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# CD143A-SR05~12 – Steering/TVS Diode Array Series

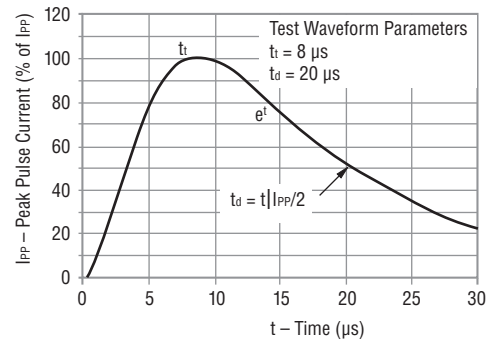


## Performance Graphs

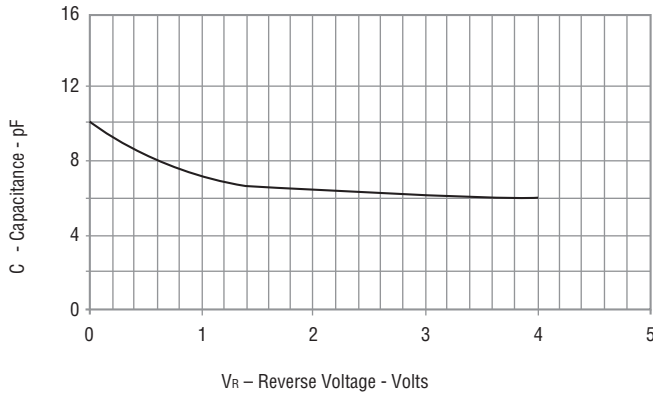
### Peak Pulse Power vs Pulse Time



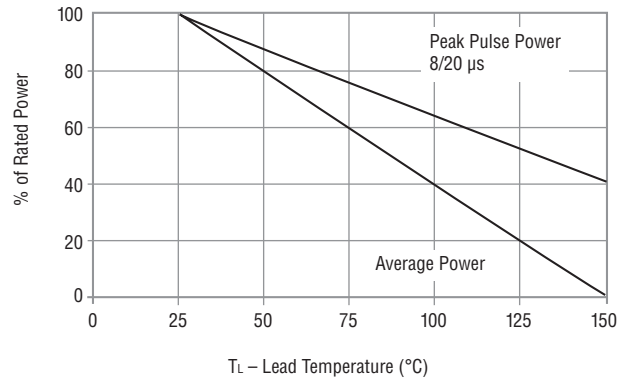
### Pulse Wave Form



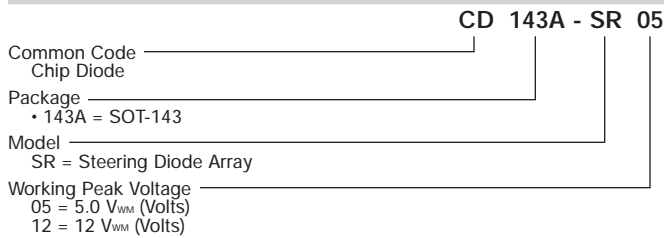
### Typical Capacitance vs. Reverse Voltage



### Power Derating Curve



### How To Order



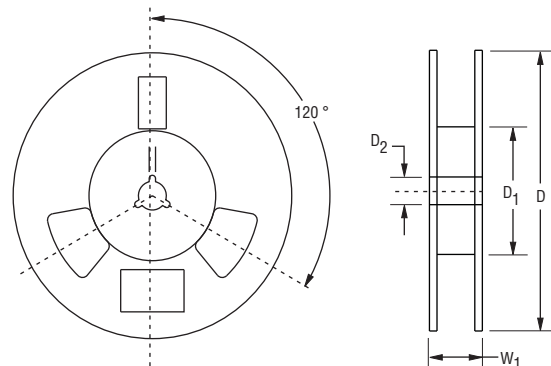
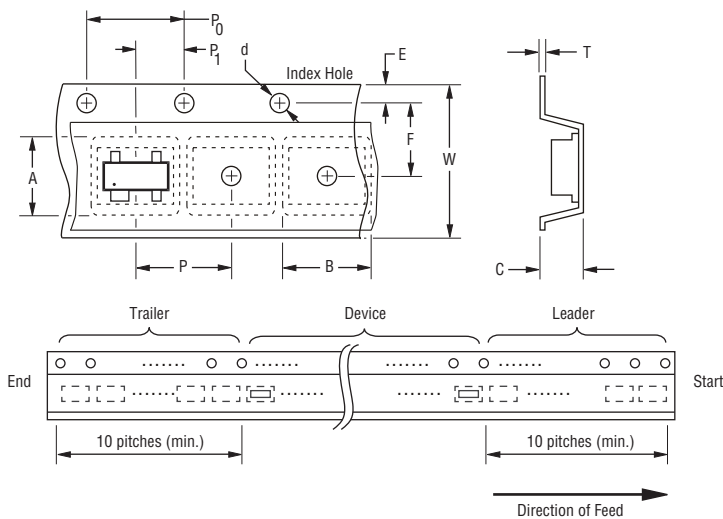
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# CD143A-SR05~12 – Steering/TVS Diode Array Series

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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	$\frac{2.75 \pm 0.10}{(0.108 - 0.004)}$
Carrier Length	B	$\frac{3.30 \pm 0.10}{(0.130 - 0.004)}$
Carrier Depth	C	$\frac{1.25 \pm 0.10}{(0.049 - 0.004)}$
Sprocket Hole	d	$\frac{1.55 \pm 0.05}{(0.061 - 0.002)}$
Reel Outside Diameter	D	$\frac{178}{(7.008)}$
Reel Inner Diameter	D <sub>1</sub>	$\frac{50.0}{(1.969)}$ Min.
Feed Hole Diameter	D <sub>2</sub>	$\frac{13.0 \pm 0.20}{(0.512 - 0.008)}$
Sprocket Hole Position	E	$\frac{1.75 \pm 0.10}{(0.069 - 0.004)}$
Punch Hole Position	F	$\frac{3.50 \pm 0.05}{(0.138 - 0.002)}$
Punch Hole Pitch	P	$\frac{4.00 \pm 0.10}{(0.157 - 0.004)}$
Sprocket Hole Pitch	P <sub>0</sub>	$\frac{4.00 \pm 0.10}{(0.157 - 0.004)}$
Embossment Center	P <sub>1</sub>	$\frac{2.00 \pm 0.05}{(0.079 - 0.002)}$
Overall Tape Thickness	T	$\frac{0.20 \pm 0.10}{(0.008 - 0.004)}$
Tape Width	W	$\frac{8.00 \pm 0.20}{(0.315 - 0.008)}$
Reel Width	W <sub>1</sub>	$\frac{14.4}{(0.567)}$ Max.
Quantity per Reel	—	3,000

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