

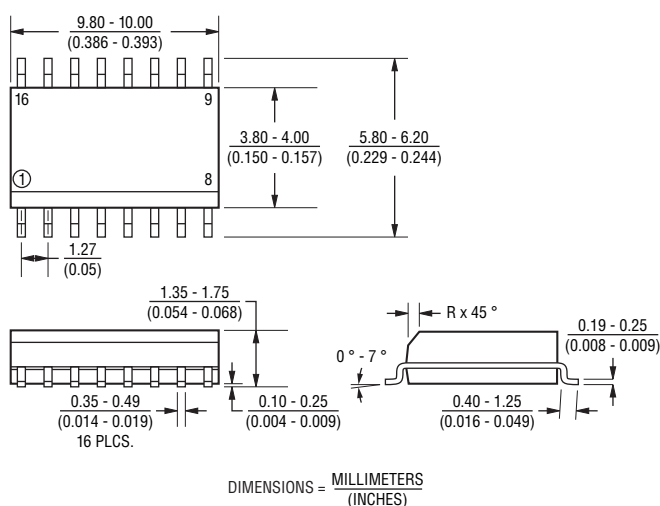
# CDNBS16-T03~T36C – TVS Diode Array Series

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## Mechanical Characteristics

This is a molded JEDEC Narrow Body SO-16 package with lead free 100 % Sn plating on the lead frame. It weighs approximately 30 mg and has a flammability rating of UL 94V-0.

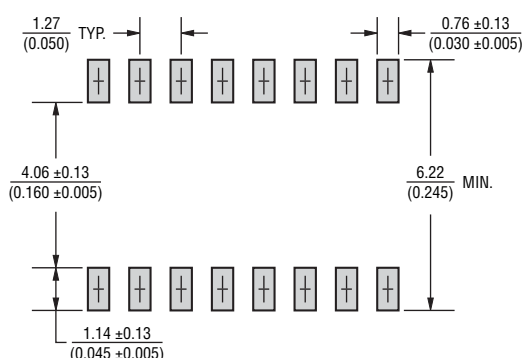
## Product Dimensions



## Typical Part Marking

CDNBS16-T03 .....	CDNBS16-T03
CDNBS16-T05 .....	CDNBS16-T05
CDNBS16-T08 .....	CDNBS16-T08
CDNBS16-T12 .....	CDNBS16-T12
CDNBS16-T15 .....	CDNBS16-T15
CDNBS16-T24 .....	CDNBS16-T24
CDNBS16-T36 .....	CDNBS16-T36
CDNBS16-T03C .....	CDNBS16-T03C
CDNBS16-T05C .....	CDNBS16-T05C
CDNBS16-T08C .....	CDNBS16-T08C
CDNBS16-T12C .....	CDNBS16-T12C
CDNBS16-T15C .....	CDNBS16-T15C
CDNBS16-T24C .....	CDNBS16-T24C
CDNBS16-T36C .....	CDNBS16-T36C

## Recommended Footprint



## How To Order

Common Code	CD	NBS16	-	T	03	C
Chip Diode						
Package		NBS16 = 16L NSOIC Package				
Model		T = Transient Voltage Suppressor				
Working Peak Reverse Voltage		03 = 3 V <sub>RWM</sub> (Volts)				
Suffix		C = Bidirectional Diode				

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

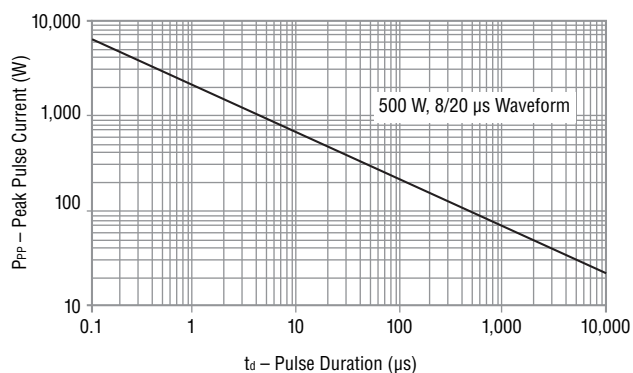
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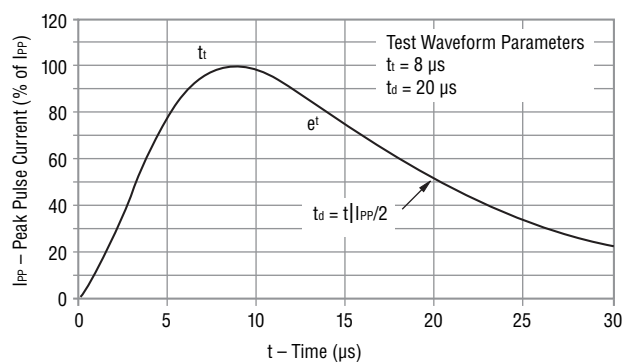
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## Performance Graphs

### Peak Pulse Power vs Pulse Time

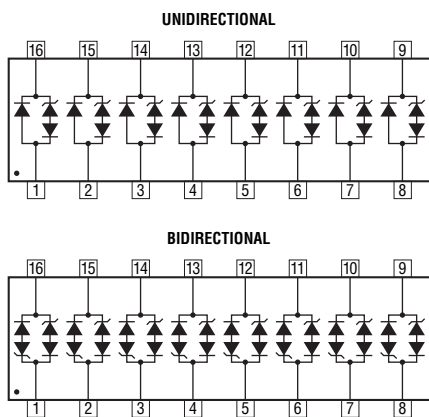


### Pulse Wave Form

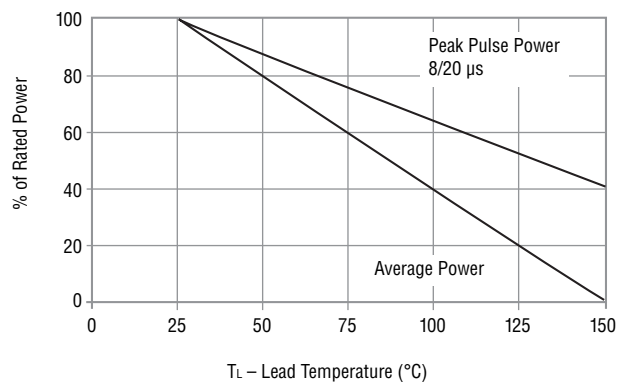


### Block Diagram

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



### Power Derating Curve



### Device Pinout

Pin	Function	Pin	Function
1	GND	9	I/O 1
2	GND	10	I/O 2
3	GND	11	I/O 3
4	GND	12	I/O 4
5	GND	13	I/O 5
6	GND	14	I/O 6
7	GND	15	I/O 7
8	GND	16	I/O 8

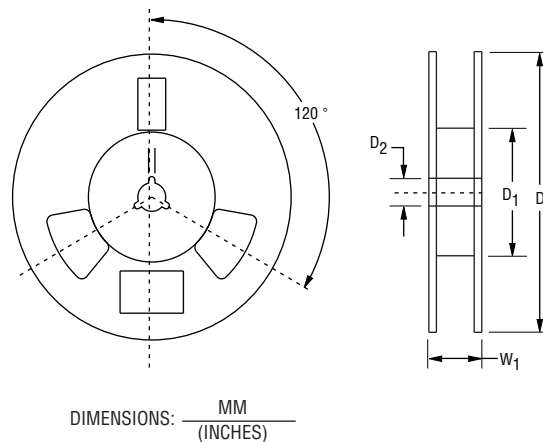
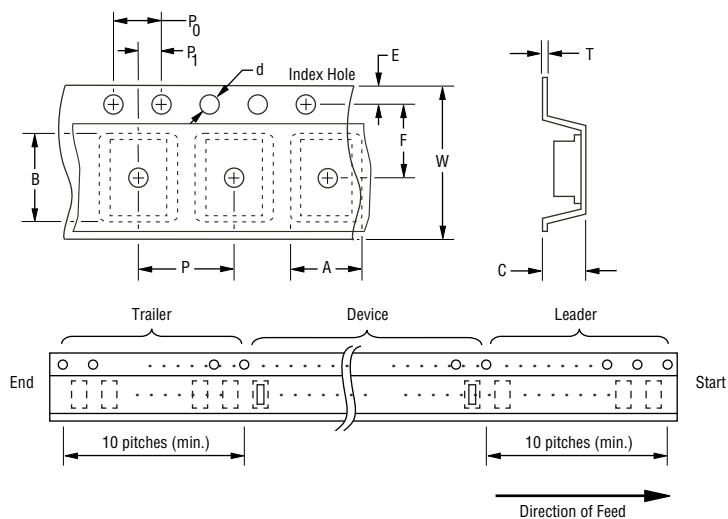
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## CDNBS16-T03~T36C – TVS Diode Array Series

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### Packaging Specifications

The product will be dispensed in Tape and Reel format (see diagram below).



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

Item	Symbol	NSOIC 16L
Carrier Width	A	$\frac{6.7 \pm 0.10}{(0.264 \pm 0.004)}$
Carrier Length	B	$\frac{10.5 \pm 0.10}{0.413 \pm 0.004}$
Carrier Depth	C	$\frac{2.10 \pm 0.10}{0.083 \pm 0.004}$
Sprocket Hole	d	$\frac{1.55 \pm 0.05}{(0.061 \pm 0.002)}$
Reel Outside Diameter	D	$\frac{330}{(12.992)}$
Reel Inner Diameter	D <sub>1</sub>	$\frac{80.0}{(3.1500)} \text{ MIN.}$
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	$\frac{8.00 \pm 0.10}{(0.315 \pm 0.004)}$
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	$\frac{16.00 \pm 0.20}{(0.630 \pm 0.008)}$
Reel Width	W <sub>1</sub>	$\frac{18.4}{(0.724)} \text{ MAX.}$
Quantity per Reel	-	2500

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