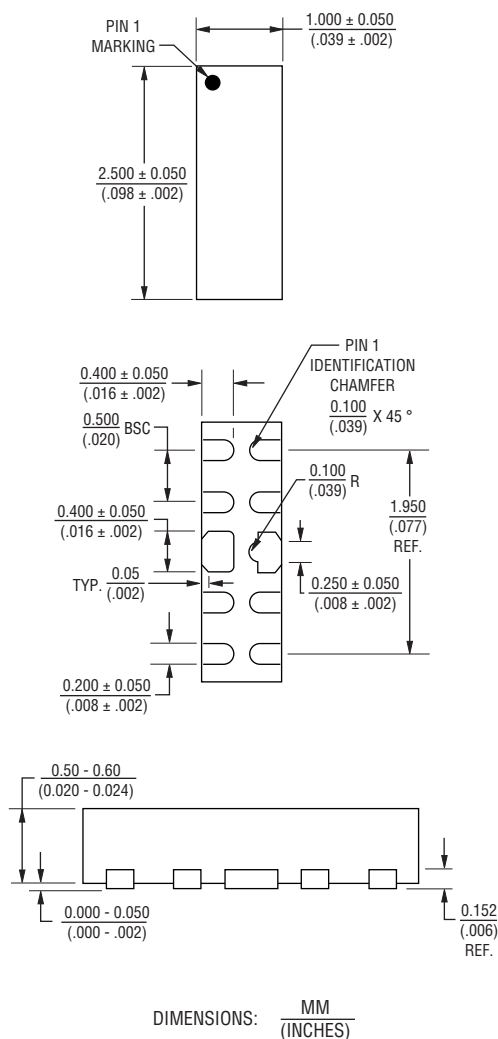


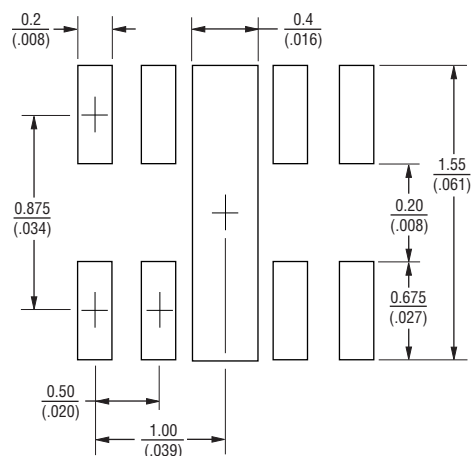
CDDFN10-0524P - Surface Mount TVS Diode Array

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Product Dimensions



Recommended Footprint



Typical Part Marking

CDDFN10-0524P524

Environmental Specifications

Moisture Sensitivity Level3
ESD Classification (HBM).....3B

How to Order

CD DFN10 - 05 24 P

Common Diode _____
Chip Diode _____
Package _____
DFN10 = DFN-10 Package
Working Peak Reverse Voltage _____
05 = 5 V_{RWM} (Volts)
Number of Lines _____
24 = 2 Ground / 4 Data Lines
Suffix _____
P = Ultra-low Capacitance

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

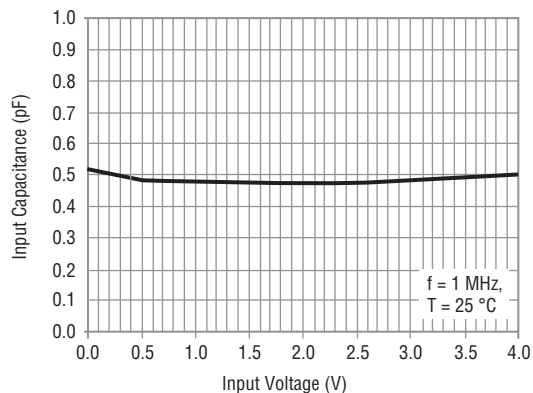
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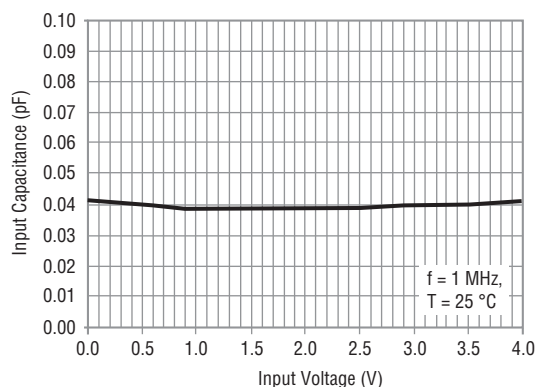
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Rating & Characteristic Curves

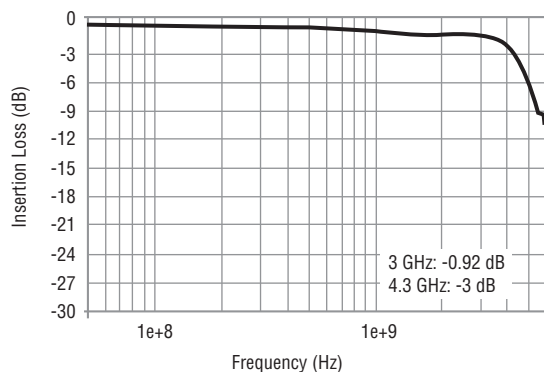
Typical Variation C_{IN} vs V_{IN}



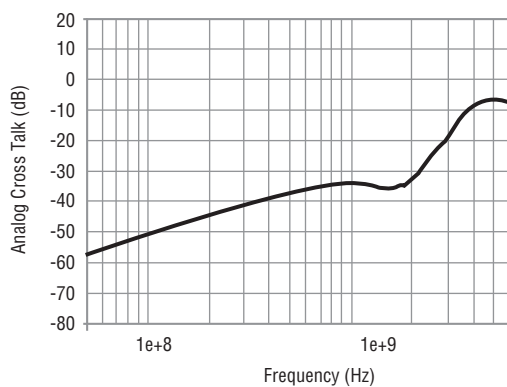
Typical Variation of $C_{IO\text{-}to\text{-}IO}$ vs V_{IN}



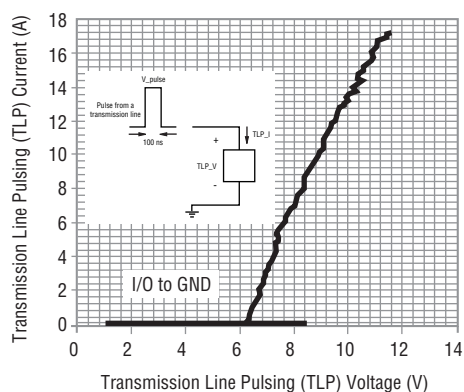
Insertion Loss S_{21} (I/O-to-GND)



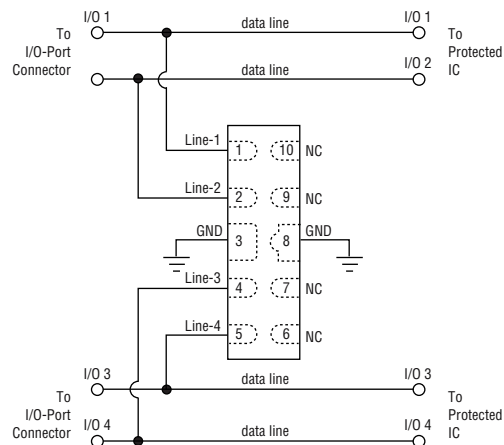
Analog Cross Talk



Transmission Line Pulsing (TLP)



Data Lines Connection



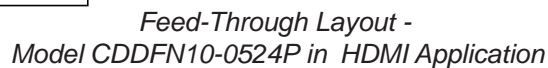
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The Bourns® Model CDDFN10-0524P is designed to protect high-speed data ports from ESD transients. For high-speed ports such as HDMI 1.4 and USB 3.0, maintaining signal line impedance is a critical requirement. The use of a DFN10 package using a “feed-through” layout provides minimal impedance change on the high-speed data line, while the ultra-low capacitance performance of the device limits signal degradation on each channel.



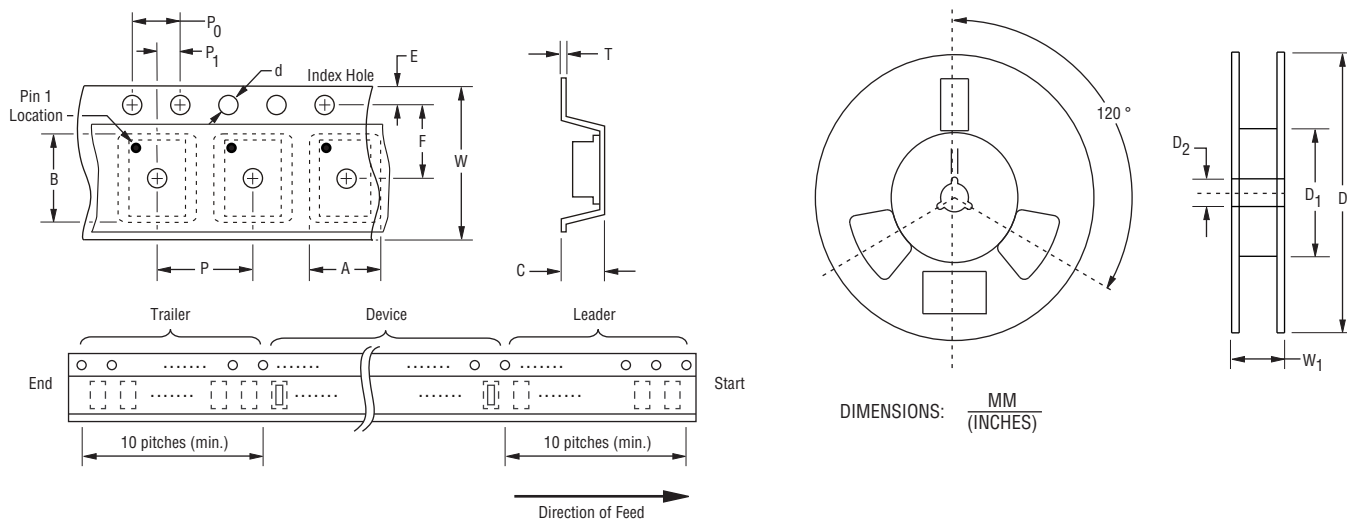
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CDDFN10-0524P - Surface Mount TVS Diode Array

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Packaging Information

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



Item	Symbol	DFN-10
Carrier Width	A	$\frac{1.45 \pm 0.05}{(0.057 \pm 0.002)}$
Carrier Length	B	$\frac{2.95 \pm 0.05}{(0.116 \pm 0.002)}$
Carrier Depth	C	$\frac{0.90 \pm 0.05}{(0.035 \pm 0.002)}$
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 ₁	$\frac{50.0}{(1.969)} \text{ MIN.}$
Feed Hole Diameter	D ₂	$\frac{13.0 \pm 0.20}{(0.512 \pm 0.008)}$
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 ₀	$\frac{4.00 \pm 0.10}{(0.157 \pm 0.004)}$
Embossment Center	P ₁	$\frac{2.00 \pm 0.05}{(0.079 \pm 0.002)}$
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 ₁	$\frac{14.4}{(0.567)} \text{ MAX.}$
Quantity per Reel	--	3000

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REV. 08/19

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