

Features

- RoHS compliant*
- Protects up to four I/O ports
- Bidirectional configuration
- ESD protection
- Low capacitance: 6 pF

Applications

- Ethernet - 10/100/1000 Base T
- Personal digital assistants
- Handheld electronics
- Cellular phones
- Video cards

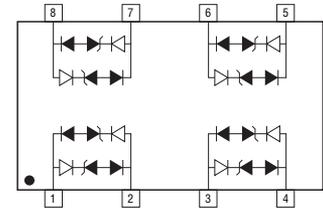
CDNBS08-SLVU2.8-8 - Low Capacitance TVS Array

General Information

The markets of portable communications, computing and video equipment are challenging the semiconductor industry to develop increasingly smaller electronic components.

Bourns offers Transient Voltage Suppressor Array combination diodes for surge and ESD protection applications in an eight lead narrow body SOIC package size format. Bourns® Chip Diodes conform to JEDEC standards, are easy to handle on standard pick and place equipment and their flat configuration minimizes roll away.

The Bourns® device will meet IEC 61000-4-2 (ESD), IEC 61000-4-4 (EFT) and IEC 61000-4-5 (Surge) requirements.



Electrical Characteristics (@ T_A = 25 °C Unless Otherwise Noted)

Parameter	Symbol	Min.	Nom.	Max.	Unit
Peak Pulse Current (t _p = 8/20 μs)	I _{PP}			30	A
Peak Pulse Power (t _p = 8/20 μs) ¹	P _{PP}			600	W
Working Voltage	V _{WM}			2.8	V
Breakdown Voltage @ 1 mA	V _{BR}	3.0			V
Leakage Current @ V _{WM}	I _D			1.0	μA
Capacitance @ 0 V, 1 MHz	C		6		pF
Snapback Voltage @ 50 mA		2.8			V
ESD Protection per IEC 61000-4-2 Contact Discharge Air Discharge	ESD	± 8 ± 15			kV
EFT Protection per IEC 61000-4-4 @ 5/50 ns	EFT			60	A
Surge Protection per IEC 61000-4-5 Clamping Voltage @ 8/20 μs	@ I _p = 5 A ²			8.5	V
	@ I _p = 24 A ²			15	V
	@ I _{PP} = 30 A ²			17	V

Notes:

1. See Peak Pulse Power vs. Pulse Time.
2. Each differential line pair.

Thermal Characteristics (@ T_A = 25 °C Unless Otherwise Noted)

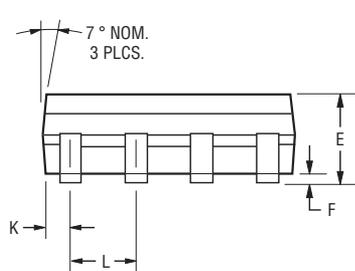
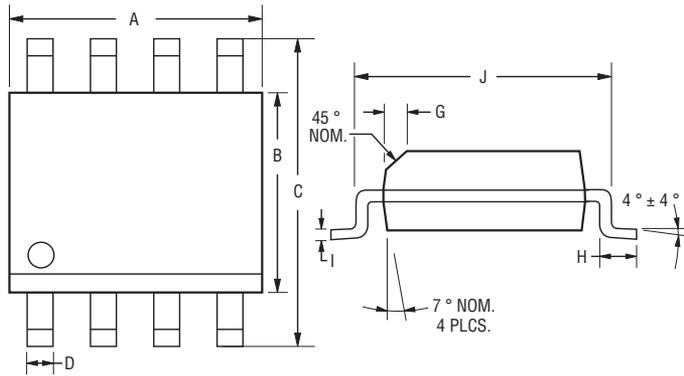
Parameter	Symbol	Min.	Nom.	Max.	Unit
Junction Temperature Range	T _J	-55	+25	+125	°C
Storage Temperature Range	T _{STG}	-55	+25	+150	°C

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Product Dimensions

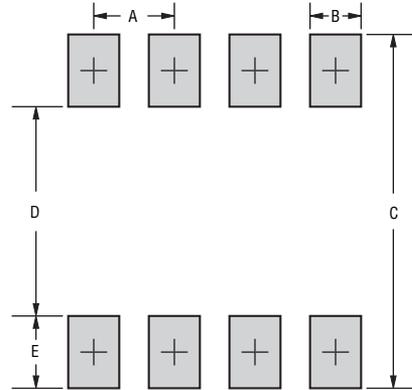
This is an RoHS compliant molded JEDEC narrow body SO-8 package with 100 % Sn plating on the lead frame. It weighs approximately 15 mg and has a flammability rating of UL 94V-0.



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

Dimensions	
A	$\frac{4.80 - 5.00}{(0.189 - 0.197)}$
B	$\frac{3.81 - 4.00}{(0.150 - 0.157)}$
C	$\frac{5.80 - 6.20}{(0.228 \pm 0.244)}$
D	$\frac{0.36 - 0.51}{(0.014 - 0.020)}$
E	$\frac{1.35 - 1.75}{(0.053 - 0.069)}$
F	$\frac{0.102 - 0.203}{(0.004 - 0.008)}$
G	$\frac{0.25 - 0.50}{(0.010 - 0.020)}$
H	$\frac{0.51 - 1.12}{(0.020 - 0.044)}$
I	$\frac{0.190 - 0.229}{(0.0075 - 0.0090)}$
J	$\frac{4.60 - 5.21}{(0.181 - 0.205)}$
K	$\frac{0.28 - 0.79}{(0.011 - 0.031)}$
L	$\frac{1.27}{(0.050)}$

Recommended Footprint

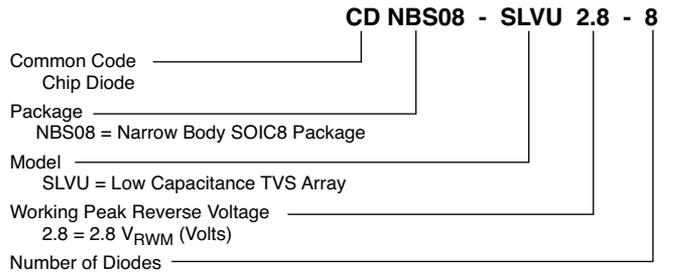


Dimensions	
A	$\frac{1.143 - 1.397}{(0.045 - 0.065)}$
B	$\frac{0.635 - 0.889}{(0.025 - 0.035)}$
C	$\frac{6.223}{(0.245)}$ Min.
D	$\frac{3.937 - 4.191}{(0.155 - 0.165)}$
E	$\frac{1.016 - 1.27}{(0.040 - 0.050)}$

Typical Part Marking

CDNBS08-SLVU2.8-8 **B** SL8

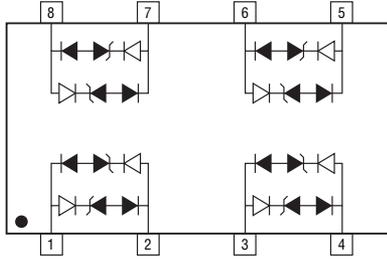
How to Order



Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.

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Block Diagram

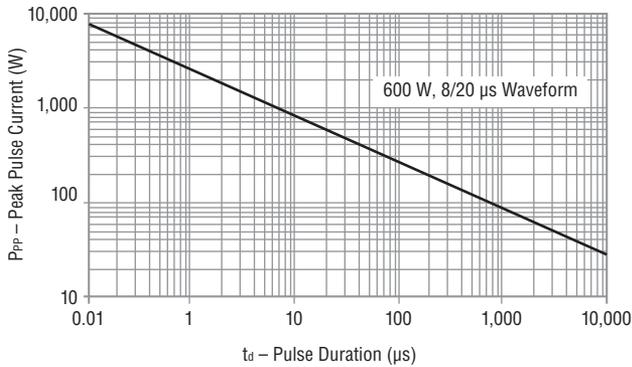


Device Pinout

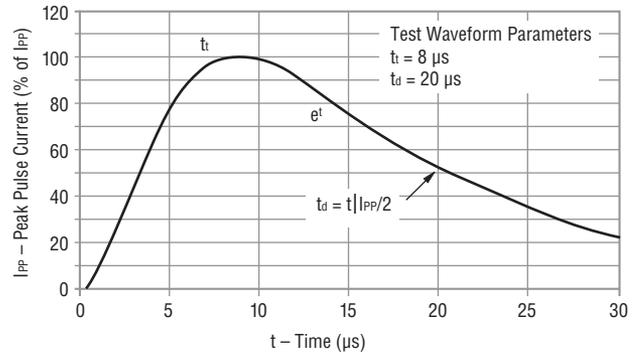
Pin	Bidirectional Common Mode	Bidirectional Differential Mode
1	Line 1	Line Pair 1
2	GND	Line Pair 1
3	GND	Line Pair 2
4	Line 4	Line Pair 2
5	Line 3	Line Pair 4
6	GND	Line Pair 4
7	GND	Line Pair 3
8	Line 2	Line Pair 3

Performance Graphs

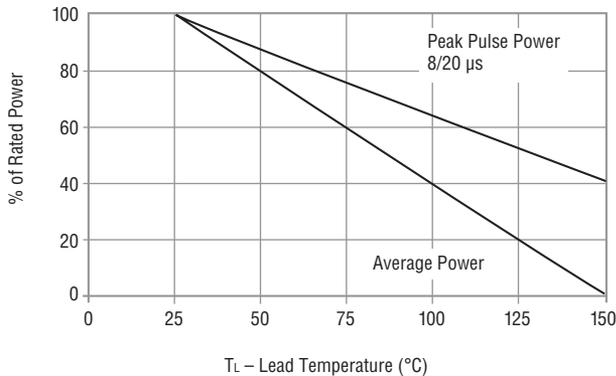
Peak Pulse Power vs Pulse Time



Pulse Waveform



Power Derating Curve



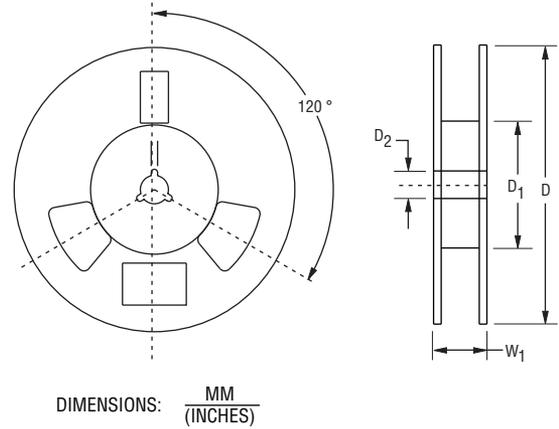
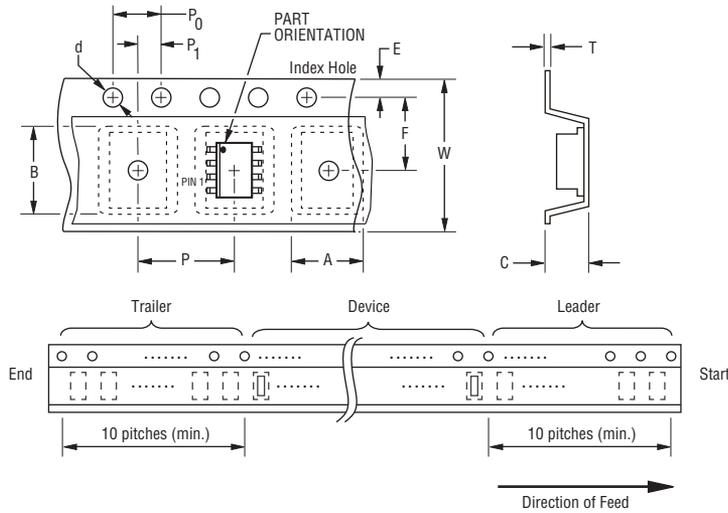
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BOURNS®

Packaging Information

The product is packaged in tape and reel format per EIA-481 standard.



Item	Symbol	NSOIC 8L
Carrier Width	A	$\frac{6.7 \pm 0.10}{(0.264 \pm 0.004)}$
Carrier Length	B	$\frac{5.5 \pm 0.10}{(0.217 \pm 0.004)}$
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 ₁	$\frac{80.0}{(3.1500)}$ 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	$\frac{8.00 \pm 0.10}{(0.315 \pm 0.004)}$
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	$\frac{12.00 \pm 0.20}{(0.472 \pm 0.008)}$
Reel Width	W ₁	$\frac{18.4}{(0.724)}$ MAX.
Quantity per Reel	--	2500

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REV. 12/12

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Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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