

CMXESD70-4

Low Capacitance, ESD Protection 4-Line Diode Array in SOT-26 package



SOT-26

Central Semiconductor's CMXESD70-4 is a 4-line silicon diode array packaged in the SOT-26 surface mount case. This device, with its low capacitance, is designed to protect four high speed data or transmission lines from over-voltage transients and ESD damage.

Features:

- ESD protection: 8kV Contact; 15kV Air (IEC61000-4-2: Level 4)
- Low capacitance
- Protects four I/O lines
- Protects supply voltage rail

Applications:

- USB 2.0 Power and Data Line Protection
- HDMI Interface
- Digital Video Interface (DVI)
- Ethernet Ports

Benefits:

- Integrated solution saves board space
- Low idle power consumption
- Design flexibility

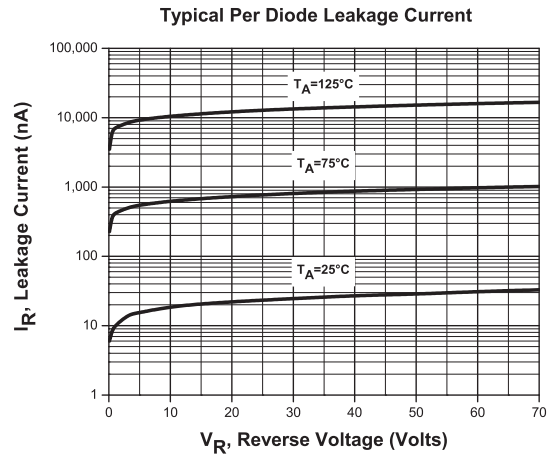
Literature



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Typical Electrical Characteristics



Samples



To order samples of this device visit:
www.centralsemi.com/info/CMXESD70-4

Weblink

Use QR reader
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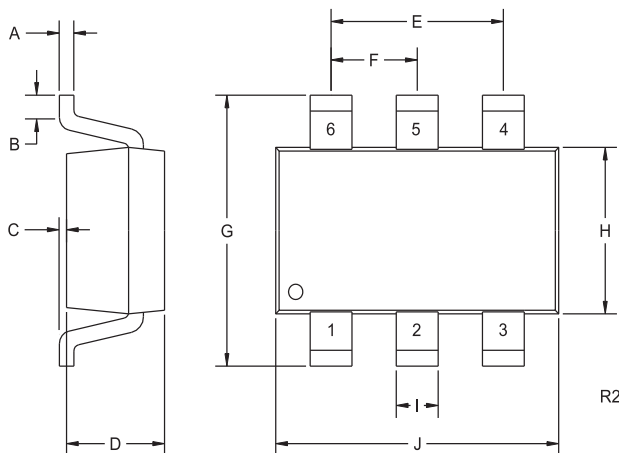
Maximum Ratings (T _A = 25°C)			Electrical Characteristics Per Diode: (T _A = 25°C)						
V _R	V _{ESD} (Contact)	T _J , T _{stg}	V _F			Reverse Leakage Current		Off State Junction Capacitance I/O to GND (V _R =0, f=1.0MHz) C _J	Off State Junction Capacitance I/O to I/O (V _R =0, f=1.0MHz) C _J
			TYP (V)	MAX (V)	@ I _F (mA)	I _R MAX (μA)	@ V _R (V)		
70	8.0*	-55 to +150	0.61	0.715	1.0	1.0	70	1.0	0.9
			0.74	0.855	10				
			0.88	1.0	50				
			1.07	1.25	150				

*IEC61000-4-2: Level 4

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Mechanical Drawing - SOT-26

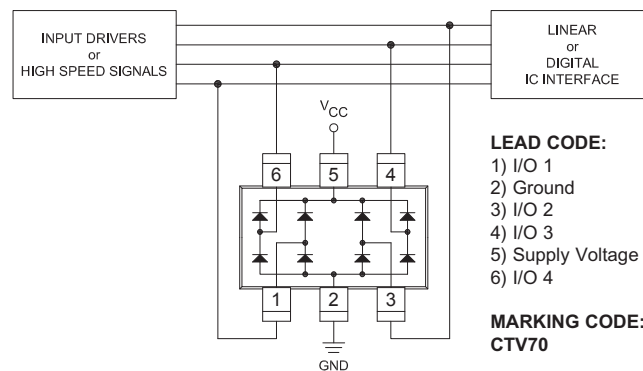
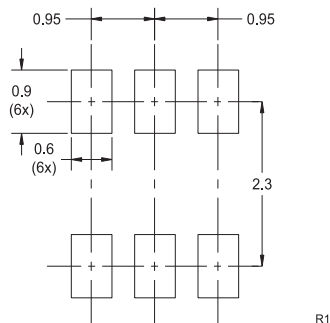


SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.11	0.19
B	0.016	-	0.40	-
C	-	0.004	-	0.10
D	0.039	0.047	1.00	1.20
E	0.074	0.075	1.88	1.92
F	0.037	0.038	0.93	0.97
G	0.102	0.118	2.60	3.00
H	0.059	0.067	1.50	1.70
I	0.016	-	0.41	-
J	0.110	0.118	2.80	3.00

SOT-26 (REV: R2)

Theory of operation: In this configuration, when the transient voltage exceeds the sum of the diode forward voltage drop (V_F), plus the supply voltage (V_{CC}), the diode will direct the surge to the supply, thereby protecting the high speed data line.

Mounting Pad (Dimensions in mm)



LEAD CODE:

- 1) I/O 1
- 2) Ground
- 3) I/O 2
- 4) I/O 3
- 5) Supply Voltage (V_{CC})
- 6) I/O 4

MARKING CODE: CTV70

Packaging Base / Ordering Information

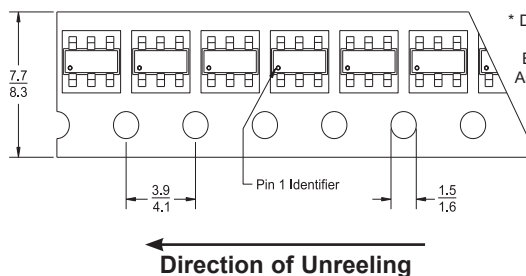
Reel Size	Quantity	Central Item No.
7"	3,000	CMXESD70-4 TR

Reel Packing Information

Reel Size	Reels per Box (Maximum)	Parts per Box (Maximum)	Box Dimensions		Shipping Weight (Max.)	
			INCH	CM	LB	KG
7"	9	27,000	9x9x5	23x23x13	4	2
	18	54,000	9x9x9	23x23x23	7	4
	40	120,000	21x9x9	53x23x23	14	7
	108	324,000	27x9x17	69x23x43	39	18

Tape Dimensions and Orientation (Dimensions in mm)

Tape Width: 8mm



* Devices are taped in accordance with Electronic Industries Association Standard EIA-481-1-A

← Direction of Unreeling

Sample devices available upon request. To order samples of this device visit: www.centrasemi.com/info/CMXESD70-4



For further information contact:
Sales at Central Semiconductor Corp.
(631) 435-1110 or visit:
www.centrasemi.com