

## CFD4448

### 120V, 250mA Switching Diode in ultra miniature SOD-882L package



SOD-882L

Central Semiconductor's CFD4448 is a high speed switching diode with low reverse leakage ideal for applications where small size and operational efficiency are prime requirements. The CFD4448 utilizes 91% less board space than the industry standard SOD-123 and 58% less than the SOT-523; equally important is its low profile of 0.4mm.

#### Features:

- Current ( $I_F = 250\text{mA}$ )
- Forward voltage drop ( $V_F = 0.91\text{V @ } 100\text{mA}$ )
- Extremely Fast Switching Speed (4.0ns)
- Low capacitance (2.0pF)

#### Applications:

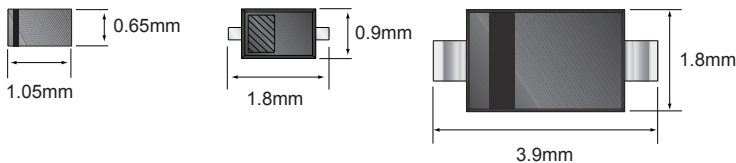
- General purpose switching
- Steering diode arrays
- Flyback diodes
- Polarity protection
- Battery powered portable equipment

#### Benefits:

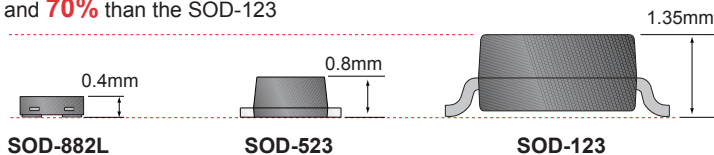
- Low profile package
- Very low reverse leakage current
- Low capacitance and fast switching

#### Package Comparisons:

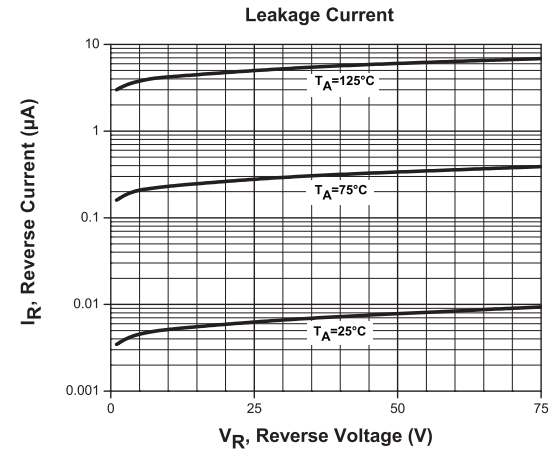
The SOD-882L utilizes **58%** less board space than the SOD-523 and **91%** than the SOD-123



The SOD-882L has **50%** lower profile than the SOD-523 and **70%** than the SOD-123



#### Typical Electrical Characteristics



#### Samples and Literature



To order samples of this device visit:  
[www.centrasemi.com/info/CFD4448](http://www.centrasemi.com/info/CFD4448)



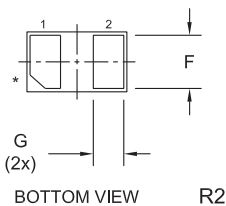
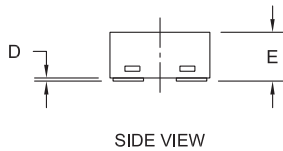
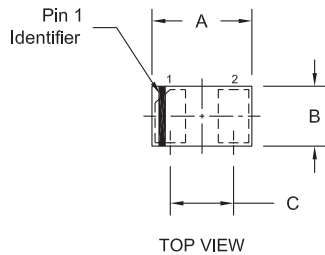
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Electrical Characteristics: ( $T_A = 25^\circ\text{C}$ unless otherwise noted)							Thermal Characteristics				
$V_{RRM}$	$I_F$	$V_F$		@ $I_F$	$I_R$	@ $V_R$	$t_{rr}$	$C_T$	$P_D$	$T_J$	$\Theta_{JA}$
(V) MAX	(mA) MAX	(V) TYP	(V) MAX	(mA)	(nA) MAX	(V)	(ns) MAX	(pF) MAX	(mW) MAX	( $^\circ\text{C}$ ) MAX	( $^\circ\text{C/W}$ ) MAX
120	250	0.59 0.72 0.91	0.65 0.77 1.0	1.0 10 100	300 100µA 500	50 50* 100	4.0	2.0	100	-65 to +150	1250

\* $T_A = 125^\circ\text{C}$

## Mechanical Drawing - SOD-882L



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.041	0.95	1.05
B	0.022	0.026	0.55	0.65
C	0.026		0.65	
D	0.000	0.002	0.00	0.05
E	0.012	0.016	0.30	0.40
F	0.018	0.022	0.45	0.55
G	0.008	0.012	0.20	0.30

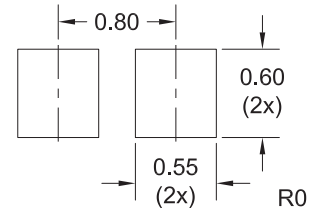
SOD-882L (REV:R2)

### Lead Code:

- 1) Cathode
- 2) Anode

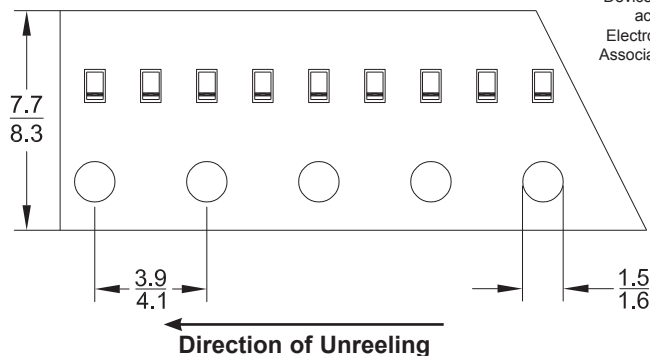
### Marking Code: X

## Mounting Pad Geometry (Dimensions in mm)



## Tape Dimensions and Orientation (Dimensions in mm)

Tape Width: 8mm



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

## Packaging Base / Ordering Information

Reel Size	Quantity	Central Item No.
7"	8,000	CFD44448 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	72,000	9x9x5	23x23x13	3	2
	18	144,000	9x9x9	23x23x23	6	3
	40	320,000	21x9x9	53x23x23	13	6
	108	864,000	27x9x17	69x23x43	34	16

To order samples of this device visit: [www.centrasemi.com/info/CFD4448](http://www.centrasemi.com/info/CFD4448)



**Innovative Discrete Semiconductors**

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