


CFTVS5V0BULC 

**SURFACE MOUNT SILICON
BI-DIRECTIONAL
ULTRA LOW CAPACITANCE
TRANSIENT VOLTAGE SUPPRESSOR**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CFTVS5V0BULC is an ultra low capacitance, low leakage, fast response, bi-directional TVS in the space saving SOD-882L surface mount package. This device is designed to protect sensitive equipment connected to high speed data lines against ESD damage.

MARKING CODE: U



FEATURES:

- Space saving SOD-882L package
- Ultra low capacitance
- Low leakage current

APPLICATIONS:

- High speed data line protection ideal for USB 3.1, Thunderbolt and HDMI 2.0 standards
- User interface protection
- Charging/power port protection

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)


Peak Power Dissipation (8x20 μs)
 Electrical Fast Transient (IEC 61000-4-4) (5x50ns)
 ESD Voltage (IEC 61000-4-2, Air)
 ESD Voltage (IEC 61000-4-2, Contact)
 Operating Junction Temperature
 Storage Temperature

SYMBOL

SYMBOL		UNITS
P _{PK}	14	W
EFT	40	A
V _{ESD}	20	kV
V _{ESD}	20	kV
T _J	-55 to +125	°C
T _{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$)

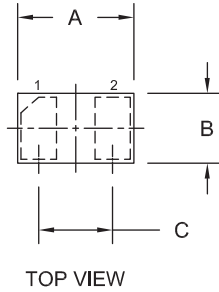
Maximum Reverse Stand-off Voltage V _{RWM}	Breakdown Voltage V _{BR} @ I _T		Test Current I _T	Maximum Reverse Leakage Current I _R @ V _{RWM}	Maximum Clamping Voltage V _C @ I _{PP}	Peak Pulse Current (8x20 μs) I _{PP}	Typical Junction Capacitance @ 0V Bias C _J	Maximum Junction Capacitance @ 0V Bias C _J
	MIN V	MAX V	mA	nA	V	A	pF	pF
5.0	6.0	10	1.0	100	14	1.0	0.2	0.35

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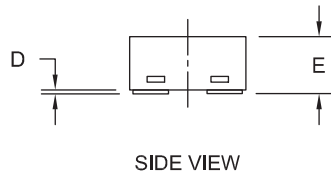


SOD-882L CASE - MECHANICAL OUTLINE

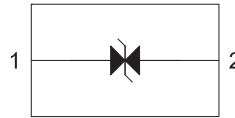


SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.041	0.95	1.05
B	0.022	0.026	0.55	0.65
C	0.026		0.65	
D	0.000	0.002	0.00	0.05
E	0.012	0.016	0.30	0.40
F	0.018	0.022	0.45	0.55
G	0.008	0.012	0.20	0.30

SOD-882L (REV:R2)



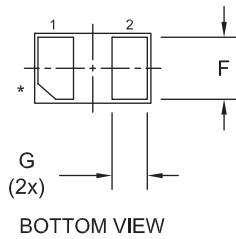
PIN CONFIGURATION



LEAD CODE:

- 1) Anode 1
- 2) Anode 2

MARKING CODE: U



* Pin 1 chamfer may appear on any corner.

R2

R4 (22-June 2015)

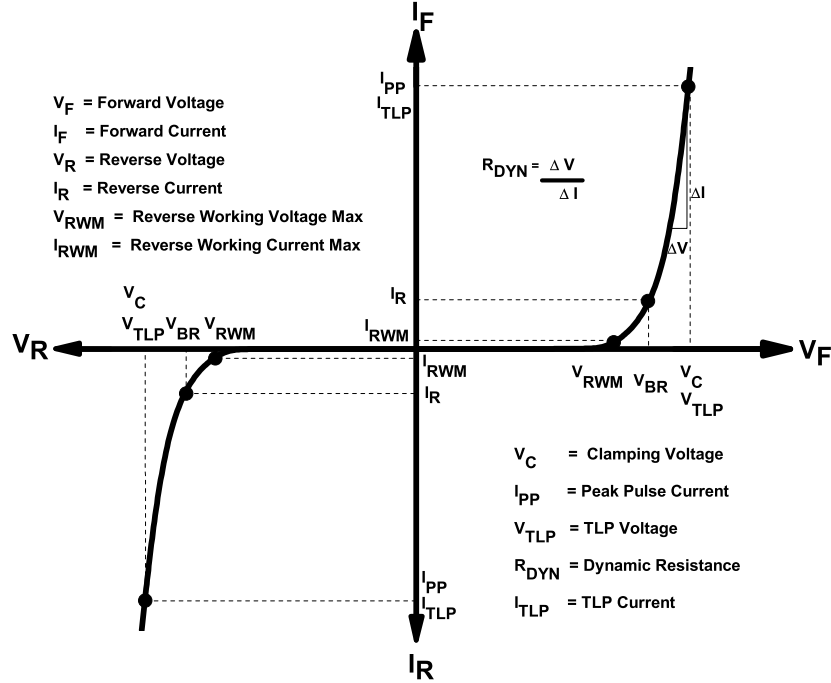
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Definition of Electrical Characteristics

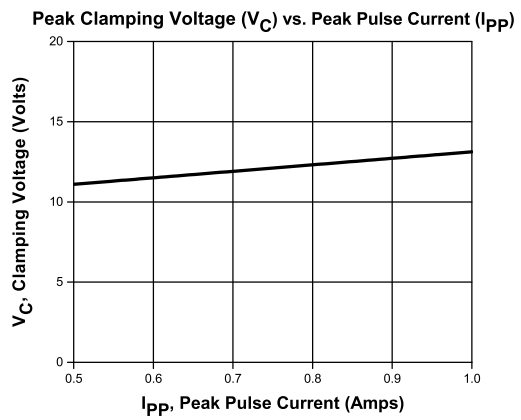
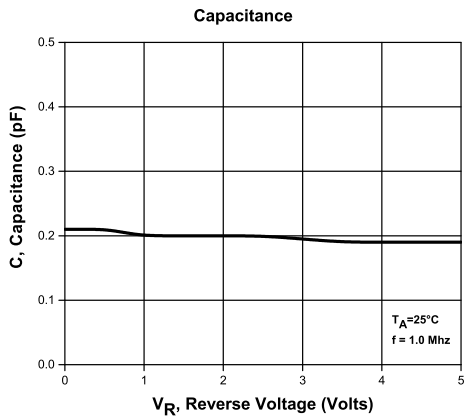
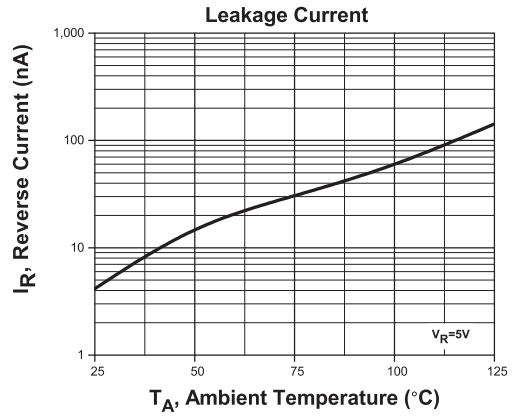
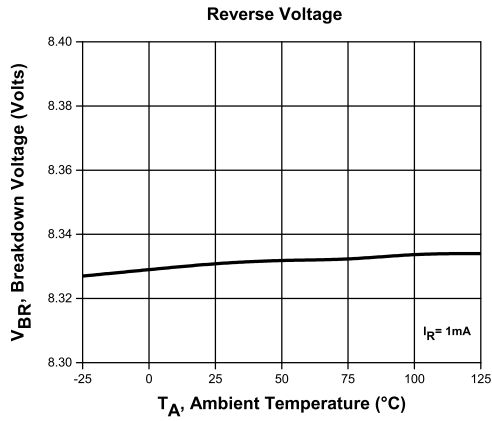


R4 (22-June 2015)

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TYPICAL ELECTRICAL CHARACTERISTICS



R4 (22-June 2015)

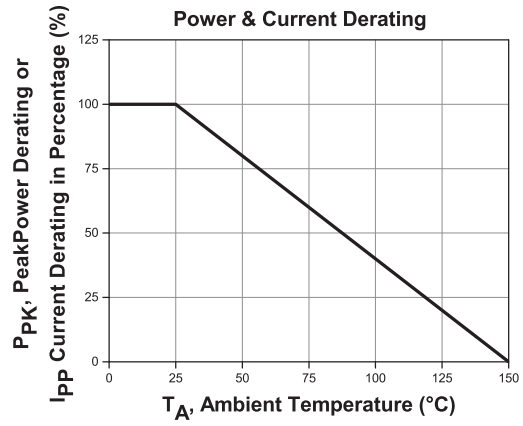
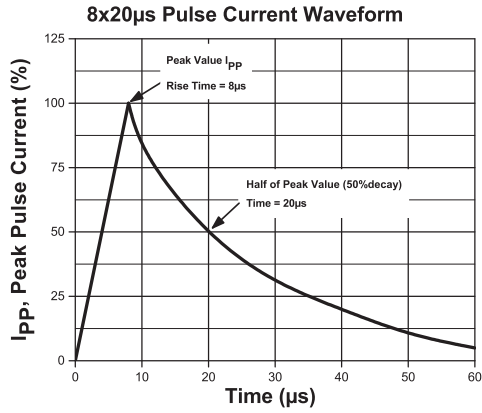
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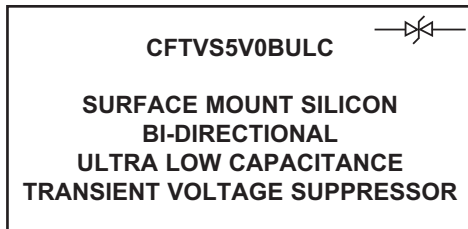
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TYPICAL ELECTRICAL CHARACTERISTICS



R4 (22-June 2015)



SERVICES

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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R4 (22-June 2015)