CFTVS5V0BULC

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

Ideal for USB 3.1



Top View Bottom View

SOD-882L CASE

Central Semiconductor Corp.

www.centralsemi.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°C)	**SYMBOL**		**UNITS**
Peak Power Dissipation (8x20µs)	P_{PK}	14	W
Electrical Fast Transient (IEC 61000-4-4) (5x50ns)	EFT	40	A
ESD Voltage (IEC 61000-4-2, Air)	V_{ESD}	20	kV
ESD Voltage (IEC 61000-4-2, Contact)	V_{ESD}	20	kV
Operating Junction Temperature	T_J	-55 to +125	°C
Storage Temperature	T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS: (T_A=25°C)

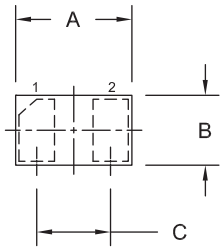
Maximum Reverse Stand-off Voltage V_{RWM}	Breakdown Voltage V_{BR} @ I_T		Test Current I_T	Maximum Reverse Leakage Current I_R @ V_{RWM}	Maximum Clamping Voltage V_C @ I_{PP}	Peak Pulse Current (8x20µs) I_{PP}	Typical Junction Capacitance @ 0V Bias C_J	Maximum Junction Capacitance @ 0V Bias C_J
V	MIN V	MAX V	mA	nA	V	A	pF	pF
5.0	6.0	10	1.0	100	14	1.0	0.2	0.35

R4 (22-June 2015)

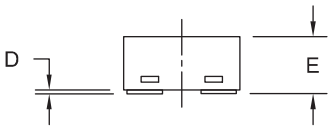
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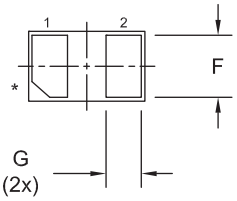
SOD-882L CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW



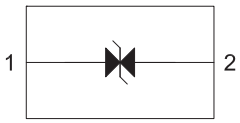
* Pin 1 chamfer may appear on any corner.

BOTTOM VIEW R2

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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



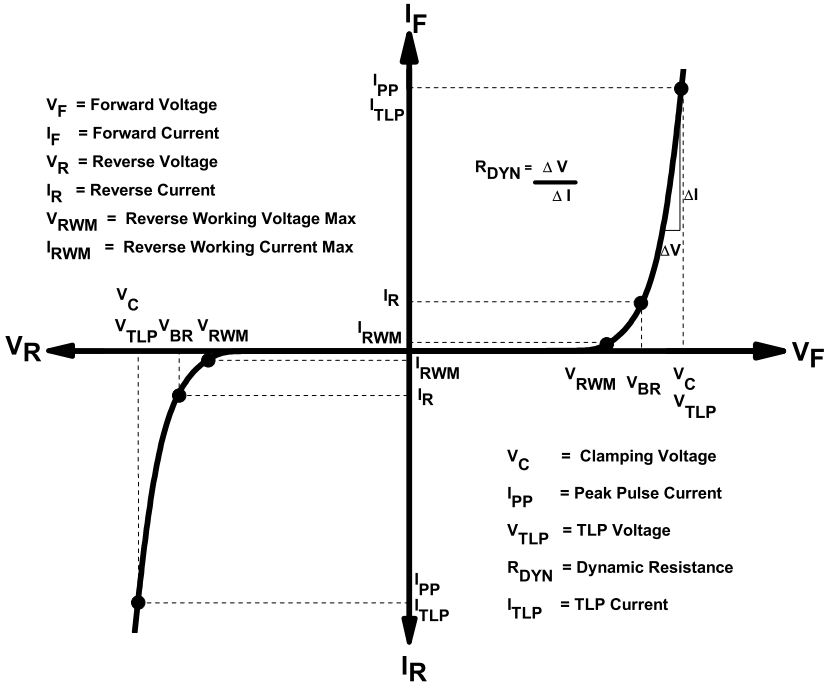
LEAD CODE:
1) Anode 1
2) Anode 2

MARKING CODE: U

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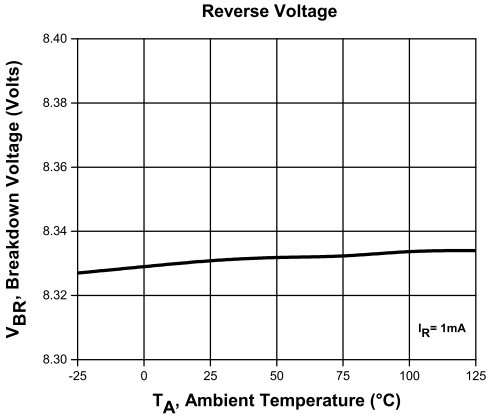
Definition of Electrical Characteristics

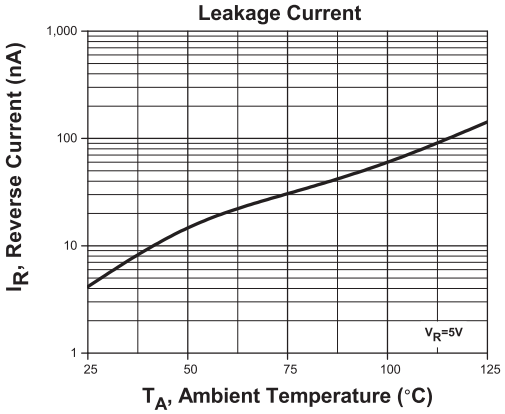


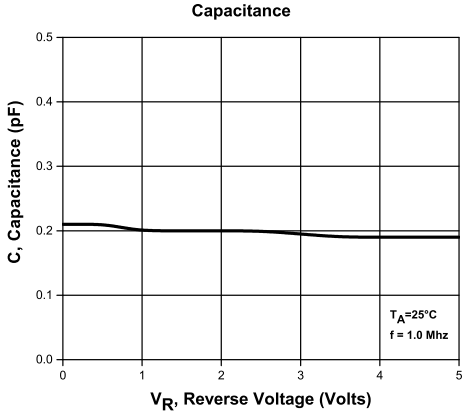
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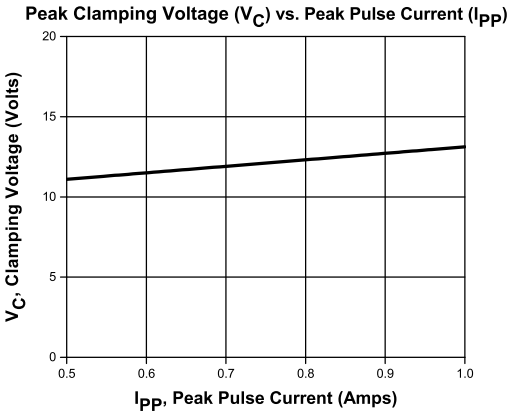
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TYPICAL ELECTRICAL CHARACTERISTICS





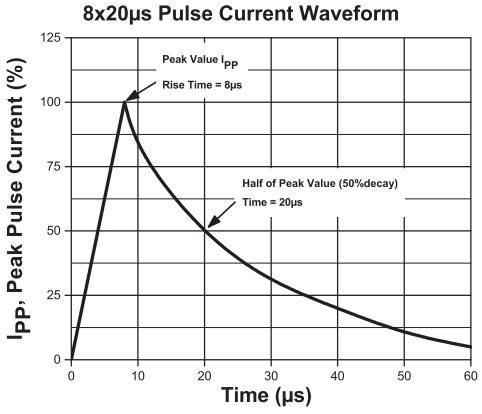


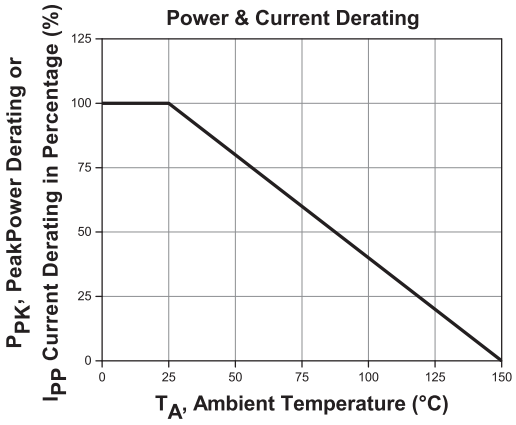


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SERVICES

- 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)