

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



SOD-882L CASE

FEATURES:

- Space saving SOD-882L package
- Ultra low capacitance
- Low leakage current
- 15kV ESD protection

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)

ESD Voltage (IEC 61000-4-2, Air)

Operating Junction Temperature

Storage Temperature

SYMBOL

P_{PK}	14
V_{ESD}	15
T_J	-55 to +125
T_{stg}	-55 to +150

UNITS

W
kV
$^{\circ}\text{C}$
$^{\circ}\text{C}$

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
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

R2 (7-August 2014)

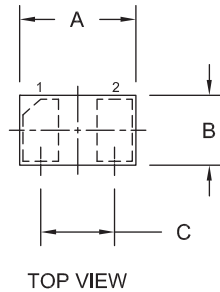
CFTVS5V0BULC



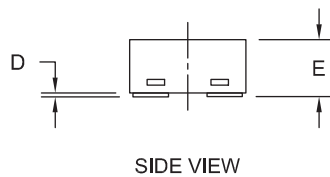
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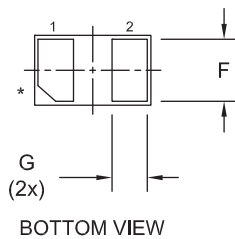
SOD-882L CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW



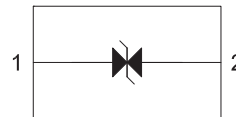
BOTTOM VIEW

R2

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 (7-August 2014)

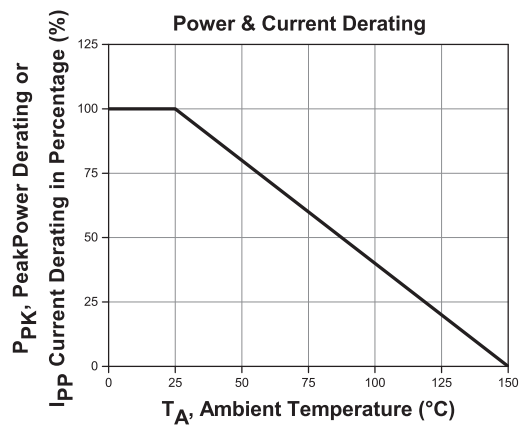
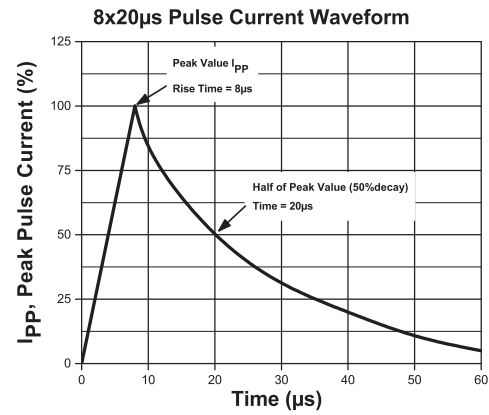
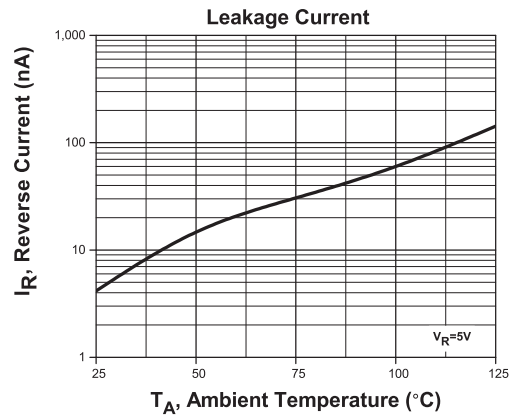
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TYPICAL ELECTRICAL CHARACTERISTICS



R2 (7-August 2014)