

CMO5V0LC

**SURFACE MOUNT SILICON
TRANSIENT VOLTAGE SUPPRESSOR**



SOD-523 CASE



www.centra-semi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMO5V0LC is an ultra low capacitance, low leakage, fast response TVS in the space saving SOD-523 surface mount package. This device is designed to protect sensitive equipment against ESD damage.

MARKING CODE: DD

APPLICATIONS:

- High speed data line protection
- User interface protection
- Charging/power port protection

FEATURES:

- Space saving SOD-523 package
- Ultra low capacitance
- Low leakage current
- 15kV ESD 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}

V_{ESD}

T_J

T_{stg}

12

15

-55 to +125

-55 to +150

UNITS

W

kV

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

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

ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$) $V_F=1.0\text{V MAX @ } I_F=10\text{mA}$ (for all types)

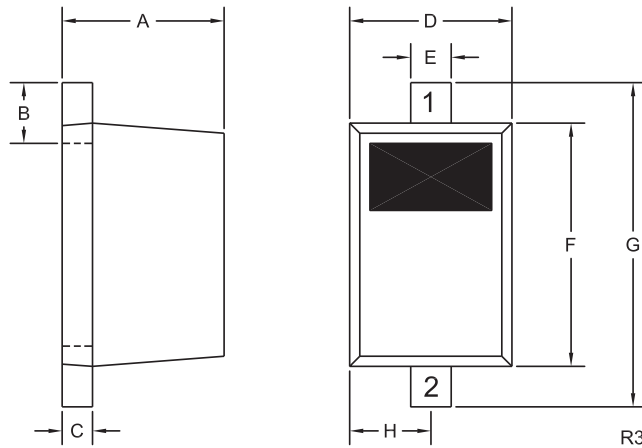
Maximum Reverse Stand-off Voltage V_{RWM}	Minimum Breakdown Voltage $V_{BR @ I_T}$	Test Current I_T	Maximum Reverse Leakage Current $I_R @ V_{RWM}$	Maximum Clamping Voltage $V_C @ I_{PP}$	Peak Pulse Current I_{PP}	Maximum Junction Capacitance @ 0V Bias C_J
V	V	mA	μA	V	A	pF
5.0	6.0	1.0	1.0	12	1.0	0.9

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SOD-523 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

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SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.020	0.031	0.50	0.80
B	0.008	0.016	0.20	0.40
C	0.002	0.008	0.05	0.20
D	0.028	0.035	0.70	0.90
E	0.008	0.014	0.20	0.35
F	0.039	0.055	1.00	1.40
G	0.055	0.071	1.40	1.80
H	0.016		0.40	

SOD-523 (REV: R3)

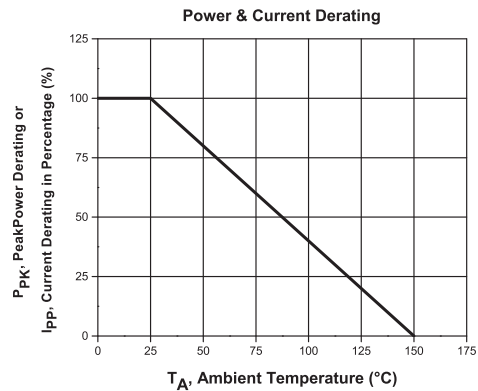
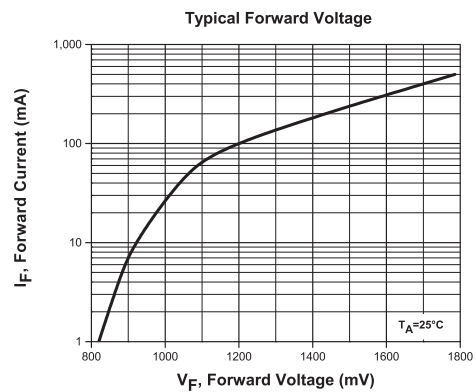
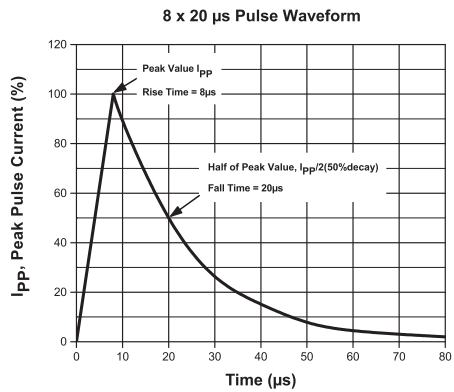
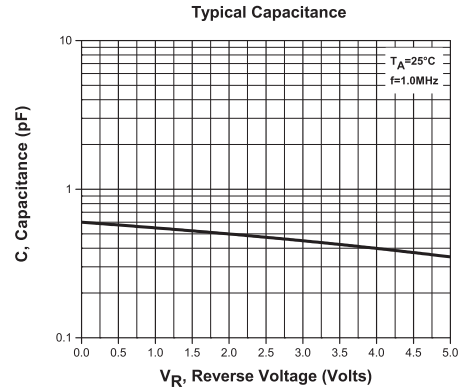
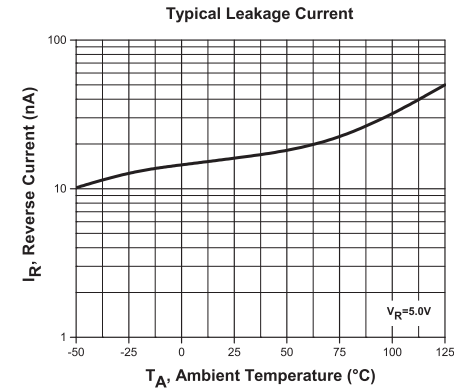
R2 (9-January 2013)

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TYPICAL ELECTRICAL CHARACTERISTICS



R2 (9-January 2013)