CMO5V0LC

SURFACE MOUNT SILICON UNI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR

SOD-523 CASE

Central Semiconductor Corp.

www.centralsemi.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

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Peak Power Dissipation (8x20µs)	P_{PK}	12	W
Electrical Fast Transient (IEC 61000-4-4) (5x50ns)	EFT	40	A
ESD Voltage (IEC 61000-4-2, Air)	V_{ESD}	15	kV
ESD Voltage (IEC 61000-4-2, Contact)	V_{ESD}	10	kV
Operating Junction Temperature	T_J	-55 to +125	°C
Storage Temperature	T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS: (T_A=25°C) V_F=1.0V MAX @ I_F=10mA

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 (8x20µs) V_C @ I_{PP}		Typical TLP Clamping Voltage (Note 1) V_{CL} @ I_{PP}		Typical Dynamic Resistance (Note 1) R_{DYN}	Maximum Junction Capacitance @ 0V Bias C_J
V	V	mA	µA	V	A	V	A	Ω	pF
5.0	6.0	1.0	1.0	12	1.0	5.0	4.0	0.96	0.9
						10	9.2		

Note 1: Transmission Line Pulse (TLP) conditions: Z_0=50Ω, tp=100ns

R4 (20-October 2015)

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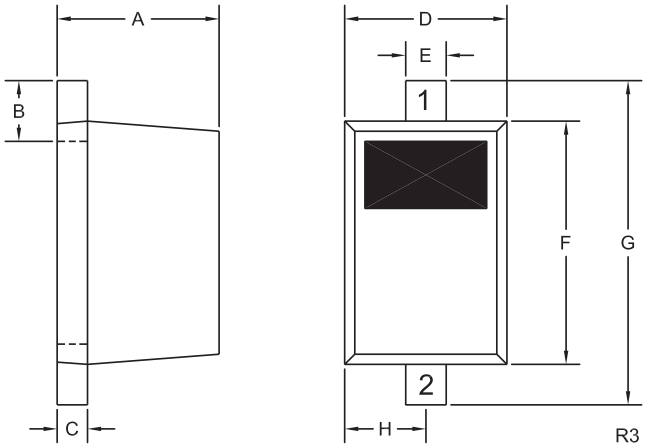
SOD-523 CASE - MECHANICAL OUTLINE



LEAD CODE:
1) Cathode
2) Anode

MARKING CODE: DD

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)

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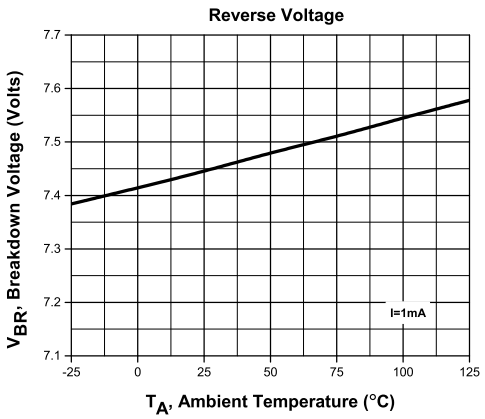
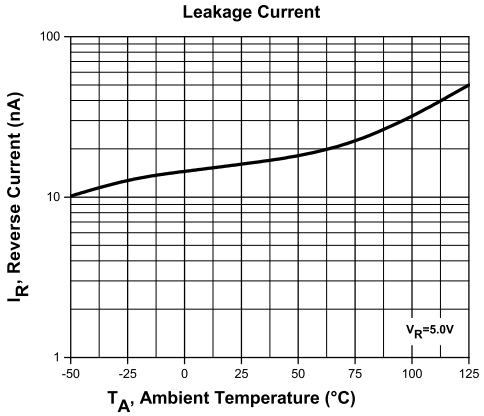
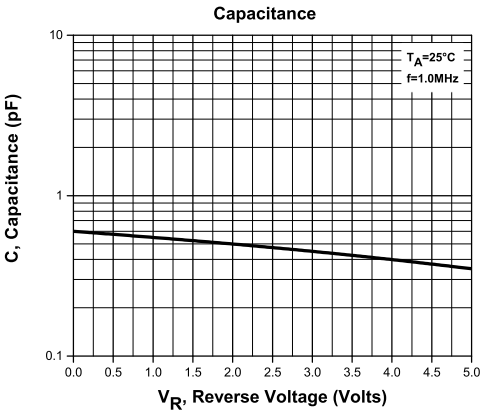
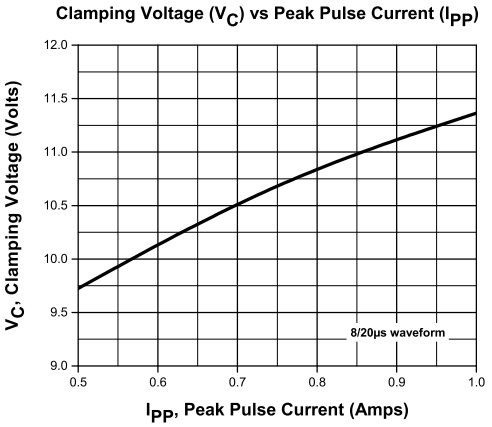
TYPICAL ELECTRICAL CHARACTERISTICS









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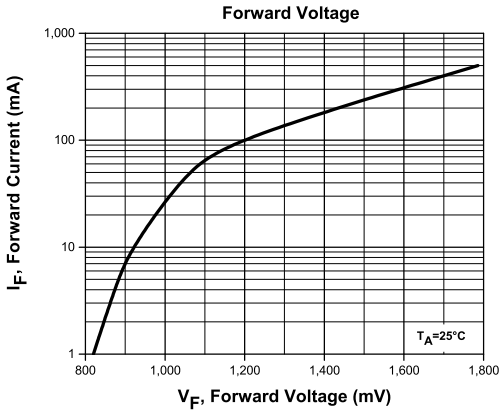

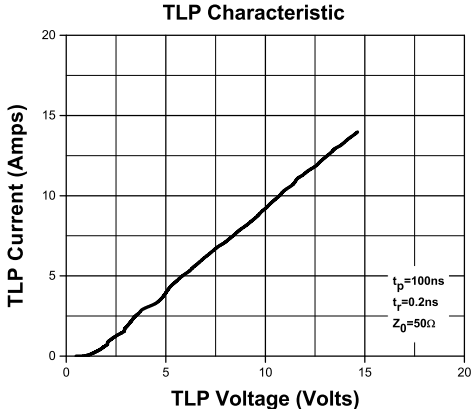

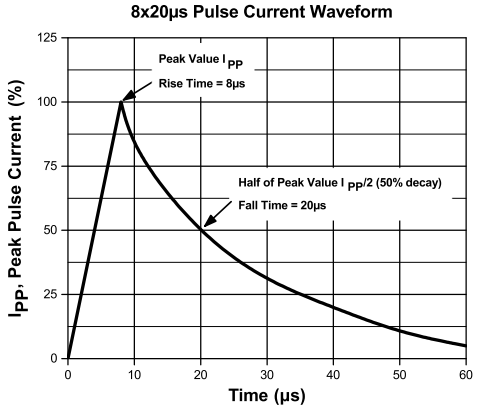

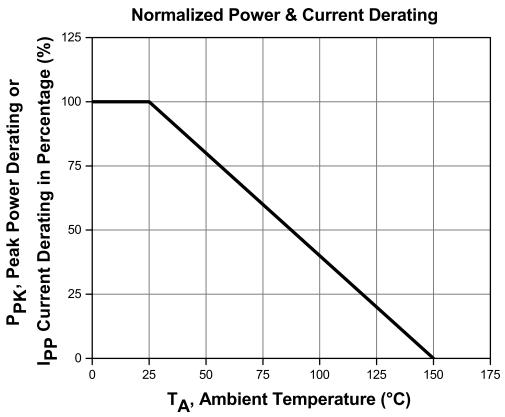

OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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