

CMATVS3V3
CMATVS5V0

SURFACE MOUNT SILICON
TRANSIENT VOLTAGE SUPPRESSOR



www.centrasemi.com

FEMTOmini™



SOD-923 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMATVS3V3 Series types are Low Leakage, Fast Response TVSs packaged in a space saving SOD-923 surface mount package. These devices are designed to protect sensitive equipment against ESD damage.

**MARKING CODES: CMATVS3V3: E
CMATVS5V0: F**

APPLICATIONS:

- PDAs
- Memory Card Ports
- Mobile Phones
- Instrumentation

FEATURES:

- Small, FEMTOmini™ 1.0 x 0.6 x 0.4mm, SOD-923 Surface Mount Package
- Low Leakage Current
- ESD Protection IEC 61000-4-2: Level 4 (15kV)

MAXIMUM RATINGS: (T_A=25°C)

Peak Power Dissipation (8x20µs)

ESD Voltage (IEC 61000-4-2)

Operating and Storage Junction Temperature

SYMBOL

P_{PK}

V_{ESD}

T_J, T_{stg}

80

15

-55 to +150

UNITS

W

kV

°C

ELECTRICAL CHARACTERISTICS: (T_A=25°C) V_F=0.9V MAX @ I_F=10mA (for all types)

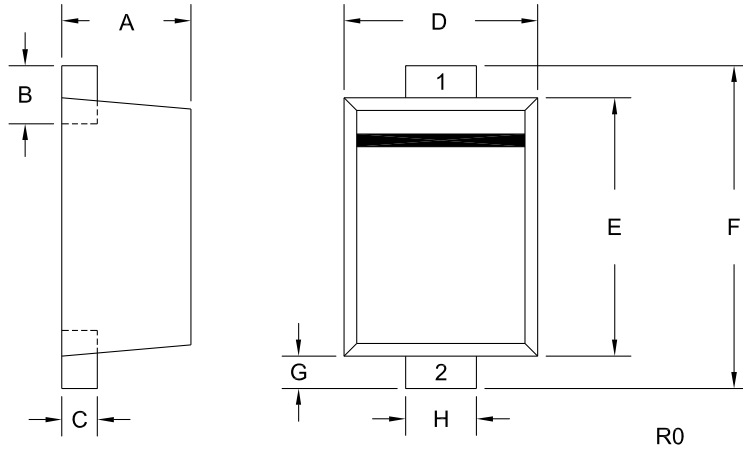
Type	Maximum Reverse Stand-off Voltage	Minimum Breakdown Voltage	Test Current	Maximum Reverse Leakage Current	Maximum Clamping Voltage	Peak Pulse Current	Typical Capacitance @ 0V Bias
	V _{RWM}	V _{BR} @ I _T	I _T	I _R @ V _{RWM}	V _C @ I _{PP}	I _{PP}	C
	V	V	mA	µA	V	A	pF
CMATVS3V3	3.3	5.0	1.0	2.5	11	7.0	45
CMATVS5V0	5.0	6.2	1.0	1.0	12.3	7.0	40

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SOD-923 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

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DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.015	0.016	0.39	0.41
B	0.004	0.010	0.10	0.26
C	0.003	0.006	0.08	0.14
D	0.022	0.026	0.55	0.65
E	0.030	0.033	0.75	0.85
F	0.035	0.043	0.90	1.10
G	0.002	0.006	0.05	0.15
H	0.007	0.011	0.17	0.27

SOD-923 (REV: R0)

R4 (5-January 2012)

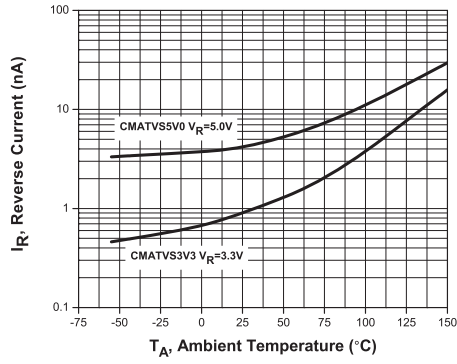
**CMATVS3V3
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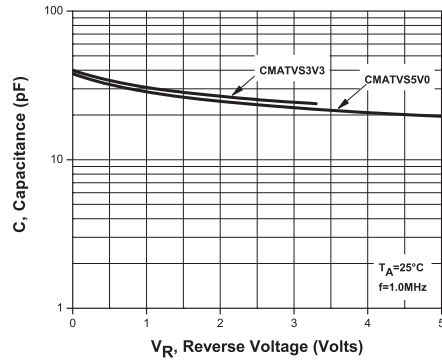


TYPICAL ELECTRICAL CHARACTERISTICS

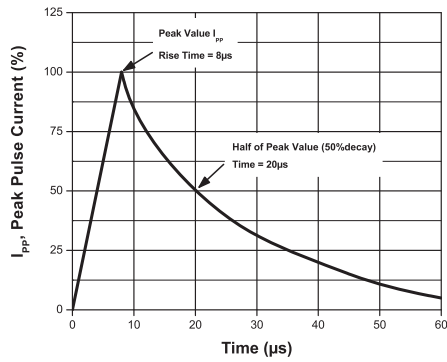
Leakage Current



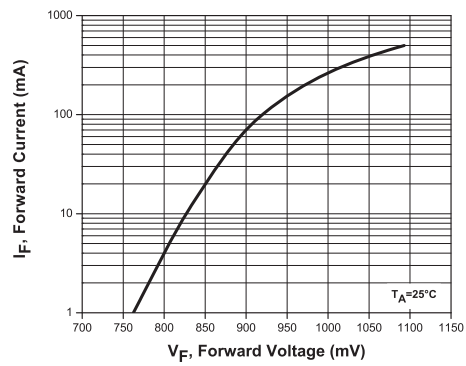
Capacitance



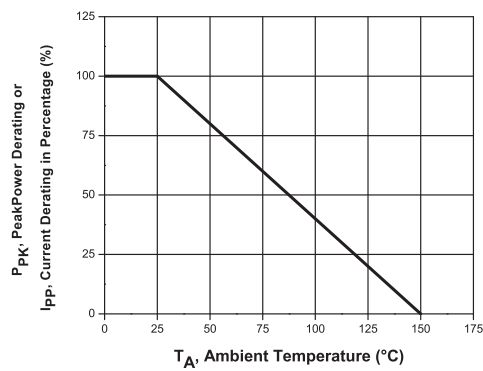
Non-Repetitive Pulse Waveform



Forward Voltage



Normalized Power & Current Derating



R4 (5-January 2012)