

CMPLC1V5
CMPLC1V5D

SURFACE MOUNT
LOW CAPACITANCE SILICON
ESD TRANSIENT
DATA LINE PROTECTOR



SOT-23 CASE

MARKING CODES:

CMPLC1V5 (SINGLE): CLV5

CMPLC1V5D (DUAL): CV5D



www.centrasemi.com

DESCRIPTION:

CENTRAL SEMICONDUCTOR CMPLC1V5 (Single) and CMPLC1V5D (Dual) types are low capacitance silicon ESD Transient data line protectors packaged in the SOT-23 surface mount package. These devices provide protection to sensitive electronic devices from spurious ESD voltage transients and feature the lowest breakdown voltage available today making them ideal for circuits operating as low as 1.2V and 1.5V DC. Typical applications include: high speed data lines, mobile phones, PDA's, microcontrollers, microprocessor I/O interfaces, and LAN/WAN equipment.

MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$)

Reverse Stand-off Voltage
Peak Pulse Power (8 x 20 μs Waveform)
Peak Pulse Current (8 x 20 μs Waveform)
ESD Voltage (HBM)
Operating Temperature
Storage Temperature

SYMBOL

V_{RWM} 1.5
 P_{PK} 50
 I_{PP} 5.0
 V_{ESD} >25
 T_{J} -50 to +125
 T_{stg} -50 to +150

UNITS

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

ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

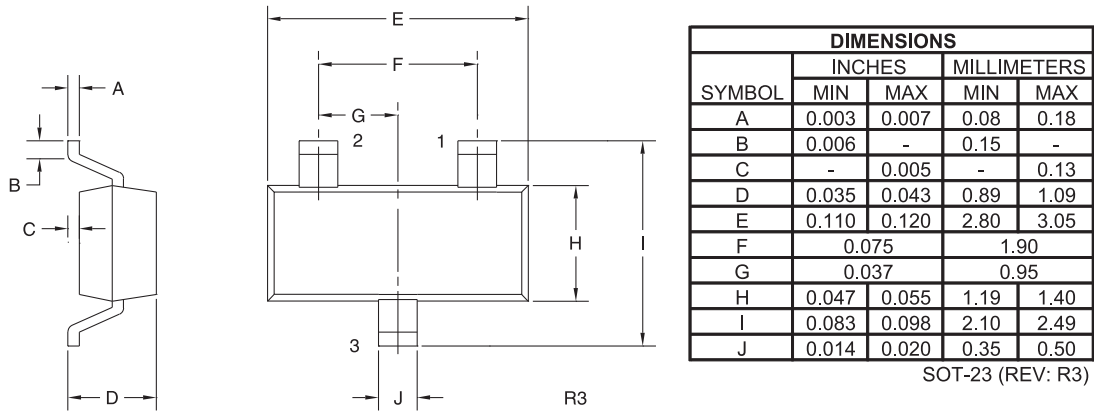
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{R}	$V_{\text{RWM}}=1.5\text{V}$		1.0	μA
BV_{R}	$I_{\text{t}}=100\mu\text{A}$	1.75		V
BV_{R}	$I_{\text{t}}=1.0\text{mA}$	2.1		V
V_{C}	$I_{\text{PP}}=1.0\text{A}$, $t_{\text{p}}=8/20\mu\text{s}$		4.0	V
V_{C}	$I_{\text{PP}}=3.0\text{A}$, $t_{\text{p}}=8/20\mu\text{s}$		7.0	V
C_{J}	$V_{\text{R}}=0$, $f=1.0\text{MHz}$		10	pF

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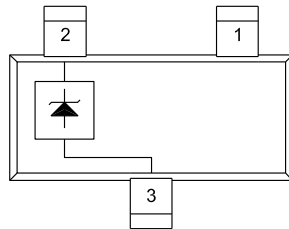
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SOT-23 CASE - MECHANICAL OUTLINE



PIN CONFIGURATIONS

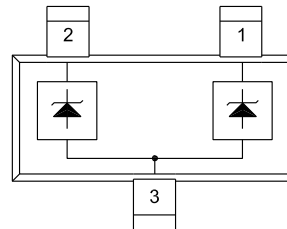


CMPLC1V5

LEAD CODE:

- 1) No Connection
- 2) Line 2
- 3) Ground

MARKING CODE: CLV5



CMPLC1V5D

LEAD CODE:

- 1) Line 1
- 2) Line 2
- 3) Ground

MARKING CODE: CV5D

R1 (27-January 2010)