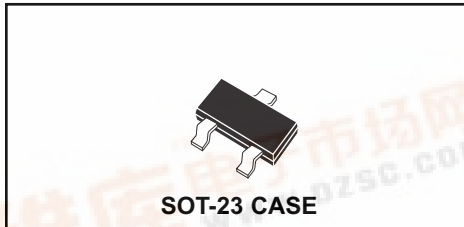


**CMPLC1V5
CMPLC1V5D**

**SURFACE MOUNT
LOW CAPACITANCE ESD TRANSIENT
DATA LINE PROTECTOR**



CentralTM
Semiconductor Corp.

DESCRIPTION:

CENTRAL SEMICONDUCTOR CMPLC1V5 (Single) and CMPLC1V5D (Dual) types are low capacitance 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.

MARKING CODE:

CMPLC1V5 (SINGLE): CLV5

CMPLC1V5D (DUAL): CV5D

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		UNITS
V_{RWM}	1.5	V
P_{PK}	50	W
I_{PP}	5.0	A
V_{ESD}	>25	kV
T_{J}	-50 to +125	$^{\circ}\text{C}$
T_{stg}	-50 to +150	$^{\circ}\text{C}$

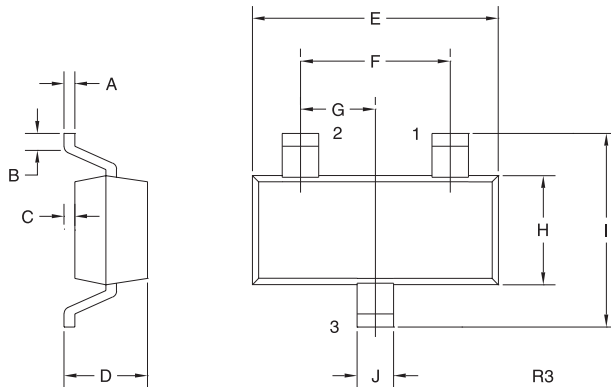
ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

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}	$V_{\text{R}}=0\text{V}$, $f=1.0\text{MHz}$ (Pin 1 to Pin 3)		10	pF

R0 (1-April 2005)

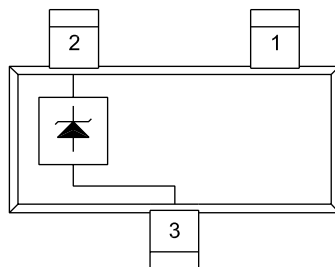
**SURFACE MOUNT
LOW CAPACITANCE ESD TRANSIENT
DATA LINE PROTECTOR**

SOT-23 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

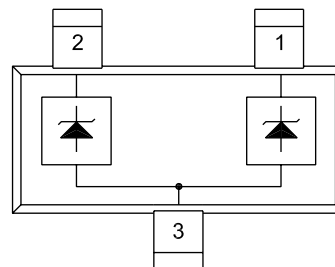


CMPLC1V5

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