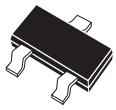
CMPLC1V5
CMPLC1V5D

SURFACE MOUNT
LOW CAPACITANCE ESD TRANSIENT
DATA LINE PROTECTOR



SOT-23 CASE

Central™
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°C)

	SYMBOL		UNITS
Reverse Stand-off Voltage	V_{RWM}	1.5	V
Peak Pulse Power (8 x 20μs Waveform)	P_{PK}	50	W
Peak Pulse Current (8 x 20μs Waveform)	I_{PP}	5.0	A
ESD Voltage (HBM)	V_{ESD}	>25	kV
Operating Temperature	T_J	-50 to +125	°C
Storage Temperature	T_{stg}	-50 to +150	°C

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	V_{RWM}=1.5V		1.0	μA
BV_R	I_t=100μA	1.75		V
BV_R	I_t=1.0mA	2.1		V
V_C	I_{PP}=1.0A, tp=8 / 20μs		4.0	V
V_C	I_{PP}=3.0A, tp=8 / 20μs		7.0	V
C_j	V_R=0V, f=1.0MHz (Pin 1 to Pin 3)		10	pF

R0 (1-April 2005)

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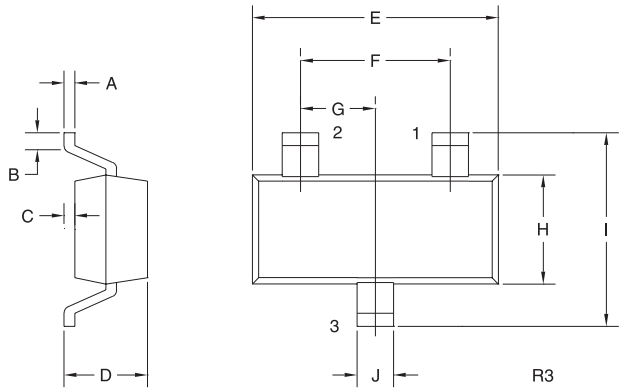
CMPLC1V5D

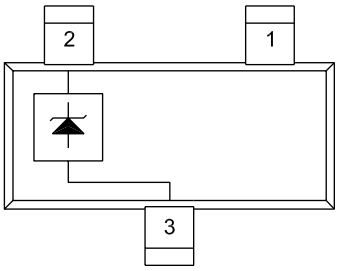
SURFACE MOUNT
LOW CAPACITANCE ESD TRANSIENT
DATA LINE PROTECTOR

SOT-23 CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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

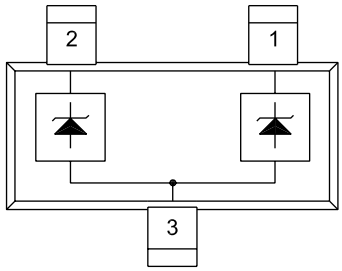
SOT-23 (REV: R3)



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

R0 (1-April 2005)