CMPLC1V5 CMPLC1V5D

SURFACE MOUNT
LOW CAPACITANCE SILICON
ESD TRANSIENT
DATA LINE PROTECTOR



www.centralsemi.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.



SOT-23 CASE

MARKING CODES:

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)	IPP	5.0	Α
ESD Voltage (HBM)	V _{ESD}	>25	kV
Operating Temperature	T_J	-50 to +125	°C
Storage Temperature	T_{sta}	-50 to +150	°C

 $\textbf{ELECTRICAL CHARACTERISTICS:} \ (T_{\mbox{\scriptsize A}} = 25 \mbox{°C unless otherwise noted})$

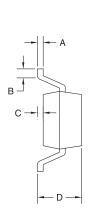
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{R}	V _{RWM} =1.5V		1.0	μΑ
BV_R	Ι _t =100μΑ	1.75		V
BV_R	I _t =1.0mA	2.1		V
$V_{\mathbb{C}}$	I _{PP} =1.0A, tp=8/20μs		4.0	V
$V_{\mathbb{C}}$	Ipp=3.0A, tp=8/20µs		7.0	V
C _{.1}	$V_R=0$, $f=1.0MHz$		10	pF

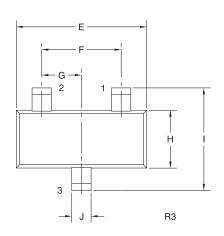
CMPLC1V5 CMPLC1V5D

SURFACE MOUNT LOW CAPACITANCE ESD TRANSIENT DATA LINE PROTECTOR



SOT-23 CASE - MECHANICAL OUTLINE

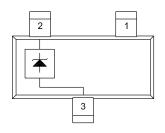


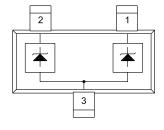


DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
Α	0.003	0.007	0.08	0.18		
В	0.006	-	0.15	-		
С	-	0.005	-	0.13		
D	0.035	0.043	0.89	1.09		
Е	0.110	0.120	2.80	3.05		
F	0.075		1.90			
G	0.037		0.95			
Н	0.047	0.055	1.19	1.40		
	0.083	0.098	2.10	2.49		
J	0.014	0.020	0.35	0.50		

SOT-23 (REV: R3)

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