

**CMKTVS5-4****SURFACE MOUNT SILICON  
LOW CAPACITANCE  
QUAD TVS/DIODE ARRAY**
[www.centrasemi.com](http://www.centrasemi.com)
**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMKTVS5-4 is a 4-line TVS/Diode array packaged in a surface mount case. With its low capacitance, this device was designed to protect four high speed data or transmission lines from over-voltage transients and ESD damage.

**MARKING CODE: CVT4**

Specified by  
STAND-OFF VOLTAGE

**SOT-363 CASE****APPLICATIONS:**

- USB 2.0 Power and Data Line Protection
- HDMI Interface
- Digital Video Interface (DVI)
- Ethernet Ports

**FEATURES:**

- Low capacitance
- Low clamping voltage
- Protects four I/O lines
- Protects supply voltage rail

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

Input Voltage  
ESD Voltage (IEC 61000-4-2, Air)  
ESD Voltage (IEC 61000-4-2, Contact)  
Operating and Storage Junction Temperature

**SYMBOL**

$V_I$  5.5  
 $V_{ESD}$  15  
 $V_{ESD}$  8.0  
 $T_J, T_{stg}$  -55 to +150

**UNITS**

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

**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$ )

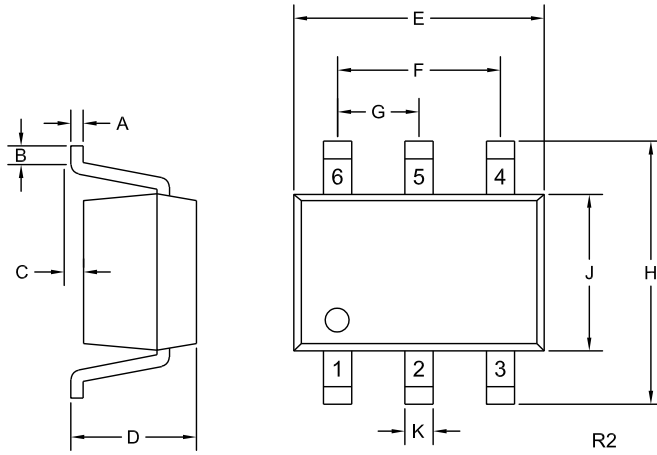
Maximum Reverse Stand-Off Voltage	Minimum Reverse Breakdown Voltage pin 5 to pin 2		Maximum Reverse Leakage Current pin 5 to pin 2		Maximum Clamping Voltage 8x20 $\mu\text{s}$ I/O to pin 2		Maximum Clamping Voltage 8x20 $\mu\text{s}$ I/O to pin 2		Maximum Off State Junction Capacitance I/O to GND ( $V_R=0, f=1.0\text{MHz}$ )	Maximum Off State Junction Capacitance I/O to I/O ( $V_R=0, f=1.0\text{MHz}$ )				
	$V_{RWM}$	$V_Z$	@	$I_Z$	$I_R$	@	$V_R$	$V_C$	@	$I_{PP}$	$V_C$	@	$I_{PP}$	$C_J$
V	V		mA	$\mu\text{A}$		V	V		A	V		A	pF	pF
5.0	6.0		1.0	3.0		5.0	14		1.0	23		5.0	3.0	1.5

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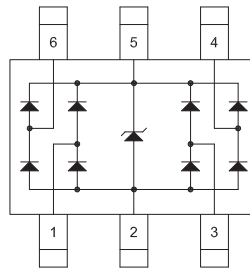
SOT-363 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
			INCHES	MILLIMETERS
	MIN	MAX	MIN	MAX
A	0.004	0.010	0.10	0.25
B	0.005	-	0.12	-
C	0.000	0.004	0.00	0.10
D	0.031	0.043	0.80	1.10
E	0.071	0.087	1.80	2.20
F	0.051		1.30	
G	0.026		0.65	
H	0.075	0.091	1.90	2.30
J	0.043	0.055	1.10	1.40
K	0.006	0.012	0.15	0.30

SOT-363 (REV: R2)

PIN CONFIGURATION

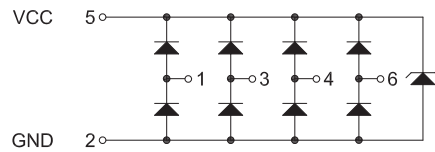


LEAD CODE:

- 1) I/O
- 2) Ground
- 3) I/O
- 4) I/O
- 5) Supply Voltage
- 6) I/O

MARKING CODE: CVT4

SCHEMATIC



R3 (6-April 2015)

CMKTVS5-4

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#### **SERVICES**

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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R3 (6-April 2015)