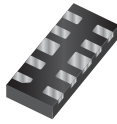


CTLTVS5-4**SURFACE MOUNT SILICON
LOW CAPACITANCE
QUAD TVS/DIODE ARRAY****Ideal for
USB
3.0****TLM1031 CASE**www.centrasemi.com**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CTLTVS5-4 is a 4-line TVS/Diode array packaged in a TLM1031 surface mount case. With its ultra low capacitance, this device was designed to protect four high speed data or transmission lines from over-voltage transients and ESD damage.

MARKING CODE: CTL5**APPLICATIONS:**

- USB 3.0 Power and Data Line Protection
- HDMI Interface Protection
- Tablets, Monitors, Displays, Smart Phones
- Ethernet Ports

FEATURES:

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

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

Peak Pulse Current (8x20 μs)
 Peak Power Dissipation (8x20 μs)
 ESD Voltage (IEC 61000-4-2, Air)
 ESD Voltage (IEC 61000-4-2, Contact)
 Operating and Storage Junction Temperature

SYMBOL

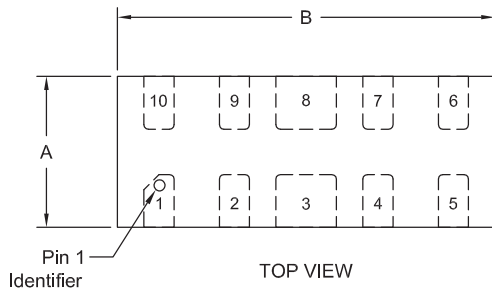
I_{PP} 2.5
 P_{PK} 32.5
 V_{ESD} 15
 V_{ESD} 8.0
 T_J, T_{stg} -55 to +150

UNITS

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

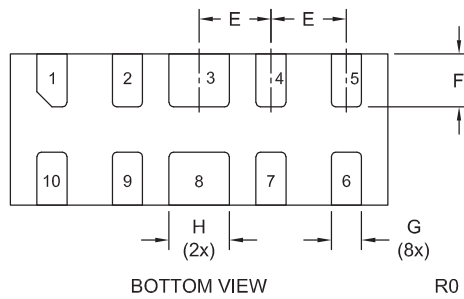
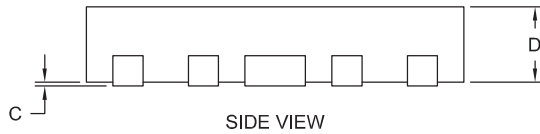
ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$)

Maximum Reverse Stand-Off Voltage V_{RWM}	Reverse Breakdown Voltage I/O to GND $V_Z @ 1.0\text{mA}$		Maximum Reverse Leakage Current I/O to GND $I_R @ V_R$		Maximum Clamping Voltage 8x20 μs I/O to GND $V_C @ I_{PP}$		Maximum Off State Junction Capacitance I/O to GND ($V_R=0, f=1.0\text{MHz}$) C_J	Maximum Off State Junction Capacitance I/O to I/O ($V_R=0, f=1.0\text{MHz}$) C_J
V	MIN V	MAX V	μA	V	V	A	pF	pF
5.0	6.0	9.0	1.0	5.0	12	1.0	0.8	0.4
					13	2.5		

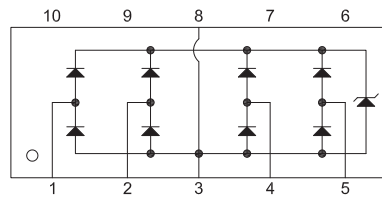
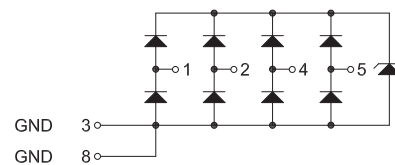
CTLTVS5-4**SURFACE MOUNT SILICON
LOW CAPACITANCE
QUAD TVS/DIODE ARRAY****TLM1031 CASE - MECHANICAL OUTLINE**

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.041	0.95	1.05
B	0.096	0.100	2.45	2.55
C	0.000	0.002	0.00	0.05
D	0.018	0.022	0.45	0.55
E	0.020		0.50	
F	0.012	0.016	0.30	0.40
G	0.006	0.010	0.15	0.25
H	0.014	0.018	0.35	0.45

TLM1031 (REV:R0)

**LEAD CODE:**

- 1) I/O
- 2) I/O
- 3) Ground
- 4) I/O
- 5) I/O
- 6) N/C
- 7) N/C
- 8) Ground
- 9) N/C
- 10) N/C

MARKING CODE: CTL5**PIN CONFIGURATION****SCHEMATIC**

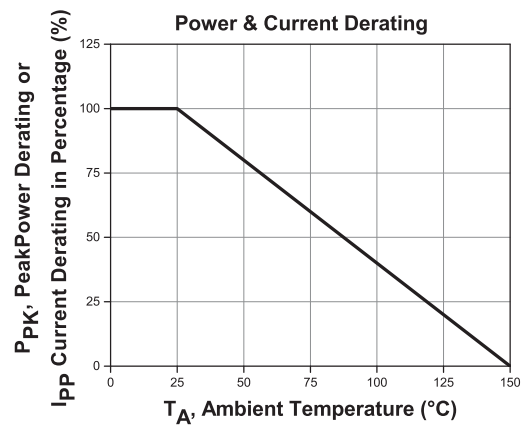
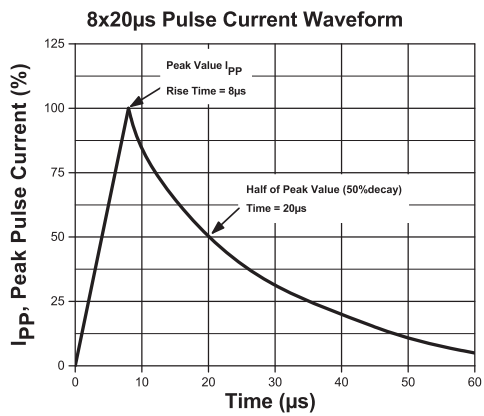
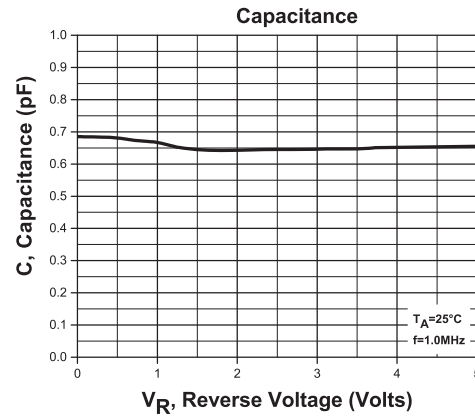
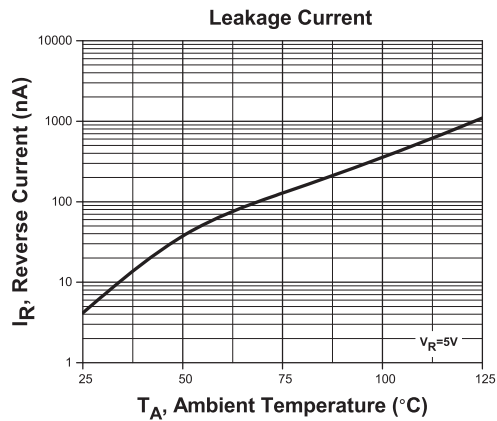
R3 (2-April 2015)

CTLTVS5-4

SURFACE MOUNT SILICON
LOW CAPACITANCE
QUAD TVS/DIODE ARRAY



TYPICAL ELECTRICAL CHARACTERISTICS



R3 (2-April 2015)

CTLTVS5-4

**SURFACE MOUNT SILICON
LOW CAPACITANCE
QUAD TVS/DIODE ARRAY**



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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Buyer understands and agrees that the foregoing liability limitations are essential elements of a purchase order or contract and that in the absence of such limitations, the material and economic terms of the purchase order or contract would be substantially different.

R3 (2-April 2015)