

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

## DESCRIPTION

- Low Capacitance rail-to-rail ESD protection in a small package designed to protect two hi-speed data line or high-frequency signal lines from the damage caused by ESD and other transients.

## FEATURES

- Response time is typically < 1 ns
- Low leakage
- Stand-off voltage: 5.0V
- IEC61000-4-2 level 4 ESD protection
- Ultra Low Capacitance : 1pF (I/O to ground)

## APPLICATION

- Digital Video Interface (DVI)/ High Definition Multimedia Interface (HDMI) interfaces.
- Wide Area Network (WAN)/ Local Area Network(LAN) systems.
- Cellular phones, MP3 players, digital cameras ... etc.
- Suitable for electronics where board space is a major design consideration.

## MAXIMUM RATINGS

Rating 25°C ambient temperature unless otherwise specified.

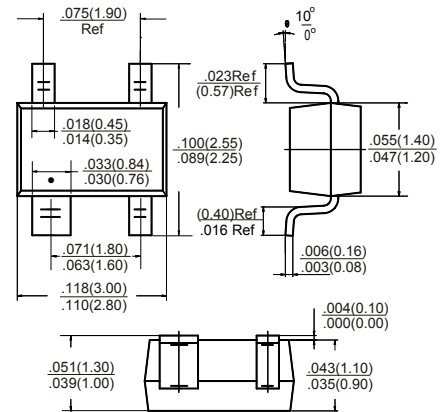
PARAMETER	SYMBOL	LIMITS	UNITS
IEC61000-4-2, Level 4(ESD) Air Contact	$V_{ESD}$	>16 >8	kV
Lead Solder Temperature - Max. (10 sec duration)	$T_L$	260	°C
Junction Temperature Range	$T_J$	-55 ~ +125	°C
Storage Temperature Range	$T_{STG}$	-55 ~ +125	°C

Stresses exceeding "Maximum Ratings" may damage the device. "Maximum Ratings" are stress ratings only. Functional operation above the recommended. Operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

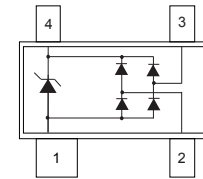
## ELECTRICAL CHARACTERISTICS (T= 25°C unless otherwise noted, Per Diode)

PARAMETER	SYMBOL	Min.	Typ.	Max.	UNIT	TEST CONDITIONS
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	5.0	V	
Reverse Leakage Current	$I_R$	-	-	100	nA	$V_{RWM} = 3V$
Breakdown Voltage	$V_{BR}$	6.1	-	8.5	V	$I_T = 1mA$
Diode Capacitance	$C_z$	-	1	-	pF	F=1MHz, $V_R=0V$ , Pin 2,3 to Pin1
	$C_{I/O}$	-	36	-		F=1MHz, $V_R=0V$ , Pin 4 to Pin1
Forward Voltage	$V_F$	-	0.7	-	V	$I_F=1mA$

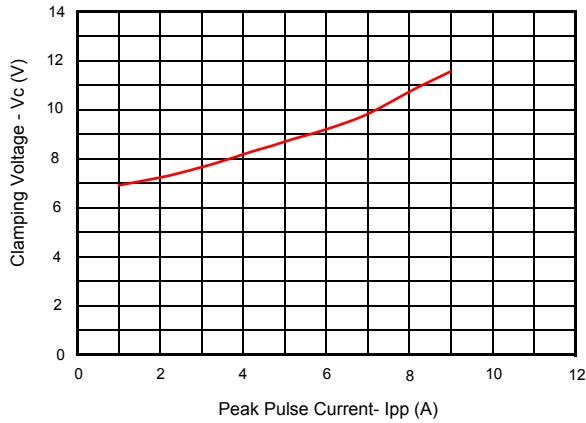
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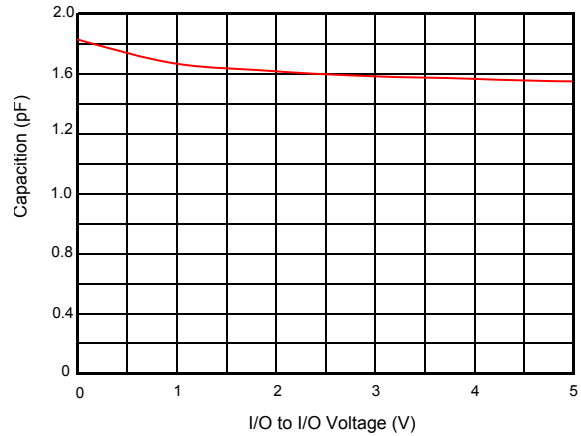
Dimensions in inches and (millimeters)



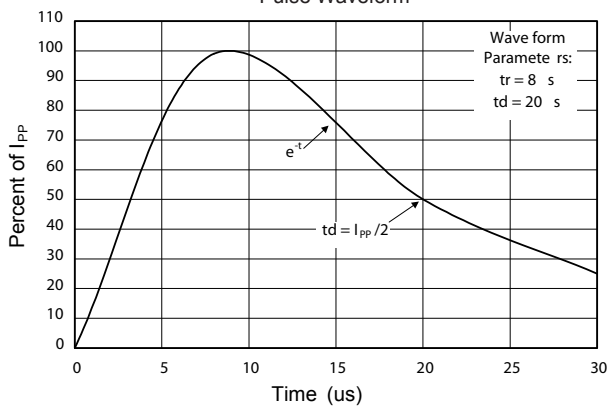
Clamping Voltage vs. Peak Pulse Current



Typical Capacitance vs. Voltage



Pulse Waveform



Recommended Pad Layout

