

## Features

- Low Capacitance
- Low Clamping Voltage
- Low Leakage Current
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## Maximum Ratings

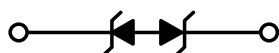
IEC61000-4-2(ESD)	Air	±30KV
	Contact	±30KV
Peak Pulse Power (8/20μs)	PPK	140W
Peak Pulse Current (8/20μs)(Note 2)	IPP	6A
Operating Junction Temperature Range	TJ	-40°C to +125°C
Storage Temperature Range	TSTG	-55°C to +125°C

Note:

1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. Non-repetitive current pulse 8/20 μs exponential decay waveform according to IEC61000-4-5.

## Internal Structure

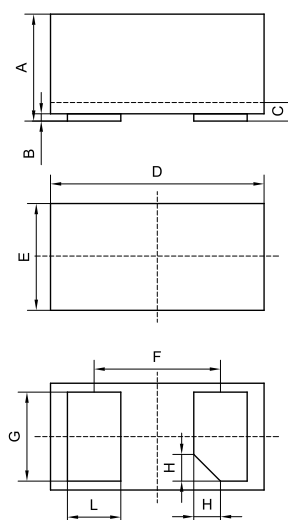


## Marking Code



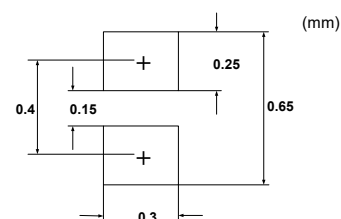
# Snap Back ESD Protection Device

## 0201-A



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.009	0.013	0.23	0.33	
B	0.000	0.002	0.00	0.05	
C	0.004	0.007	0.10	0.18	
D	0.022	0.027	0.55	0.67	
E	0.010	0.015	0.25	0.37	
F	0.014		0.355		TYP.
G	0.008	0.011	0.20	0.28	
H	0.003		0.079		TYP.
L	0.004	0.009	0.11	0.22	

## SUGGESTED SOLDER PAD LAYOUT



**Electrical Characteristics @ 25°C (Unless Otherwise Specified)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	$V_{RWM}$				15	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	15.5		20	V
Reverse Leakage Current	$I_R$	$V_{RWM}=24V$			0.1	$\mu A$
Clamping Voltage <sup>Note1</sup>	$V_C$	$I_{PP}=1A, t_p=8/20\mu s$		16	18	V
Clamping Voltage <sup>Note1</sup>	$V_C$	$I_{PP}=6A, t_p=8/20\mu s$		21	23	V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$		6	7	pF
Dynamic Resistance <sup>Note2</sup>	$R_{DYN}$	TLP, $t_p=100ns$		1		$\Omega$

Note:

1. Non-repetitive current pulse 8/20 $\mu s$  exponential decay waveform according to IEC61000-4-5.
2. TLP parameter:  $Z_0=50\Omega$ ,  $t_p=100ns$ ,  $t_r=2ns$ , averaging window from 60ns to 80ns.  $R_{DYN}$  is calculated from 4A to 16A.

## Curve Characteristics

Fig. 1 - 8 X 20 $\mu$ s Pulse Waveform

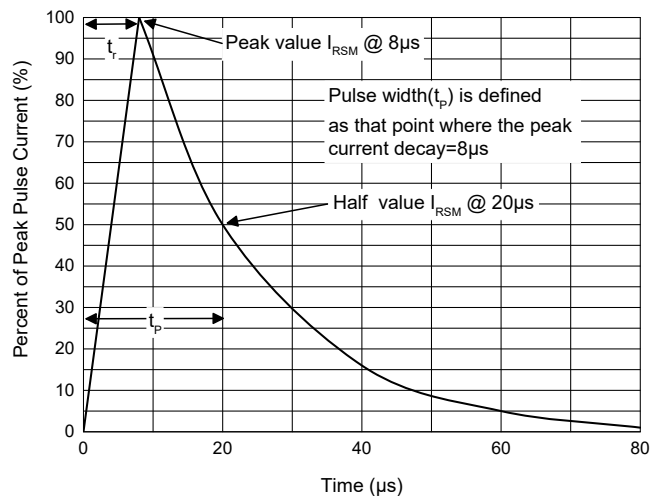


Fig. 2 - Non-Repetitive Peak Pulse Power

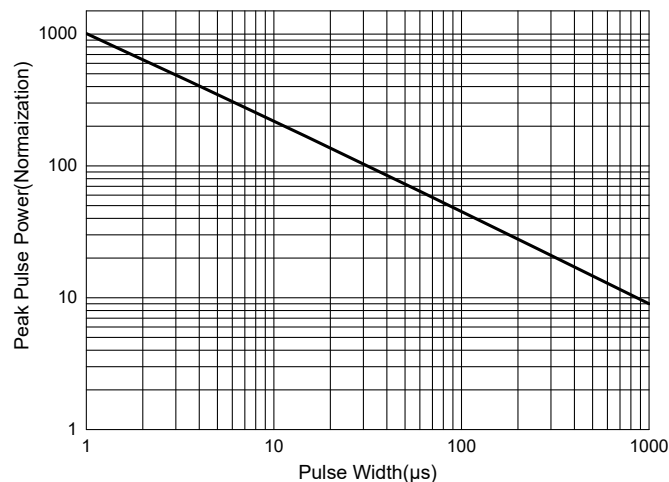


Fig. 3 - Capacitance Characteristics

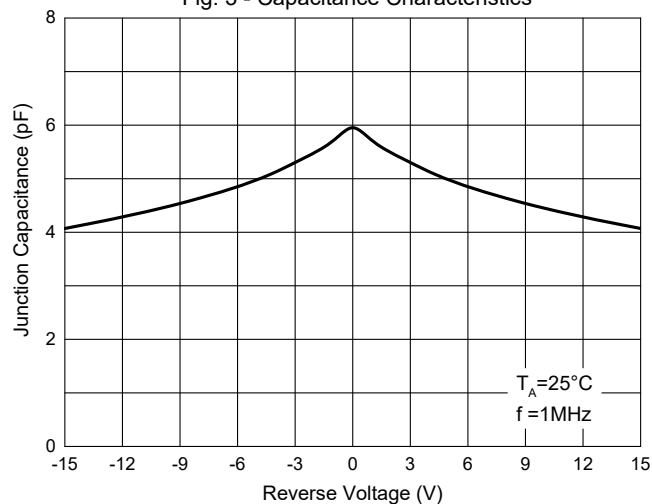


Fig. 4 - Clamping Voltage Characteristics

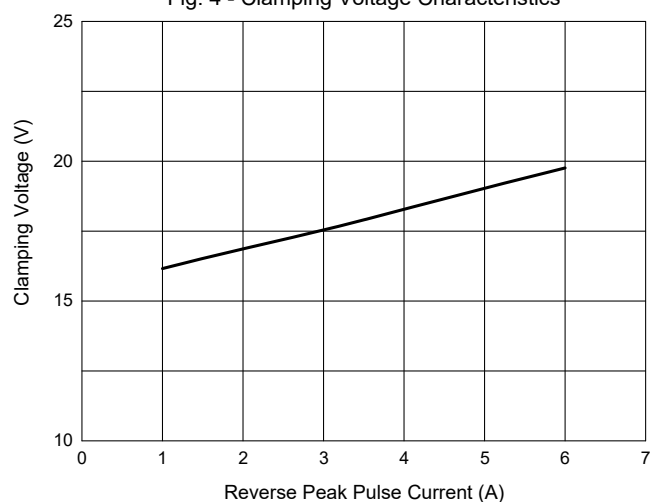


Fig. 5 - TLP Measurement

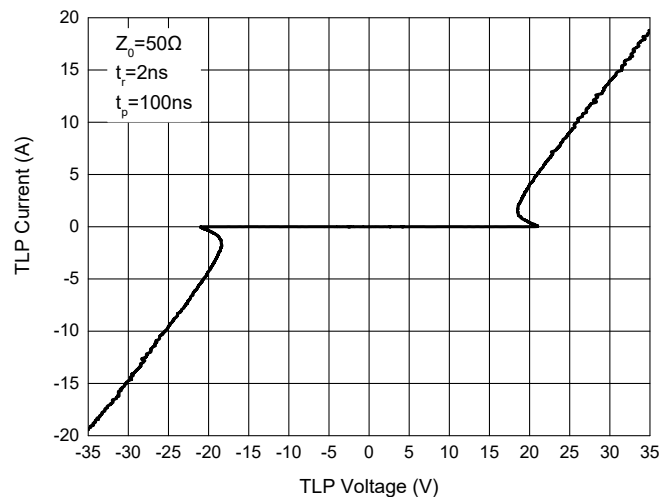
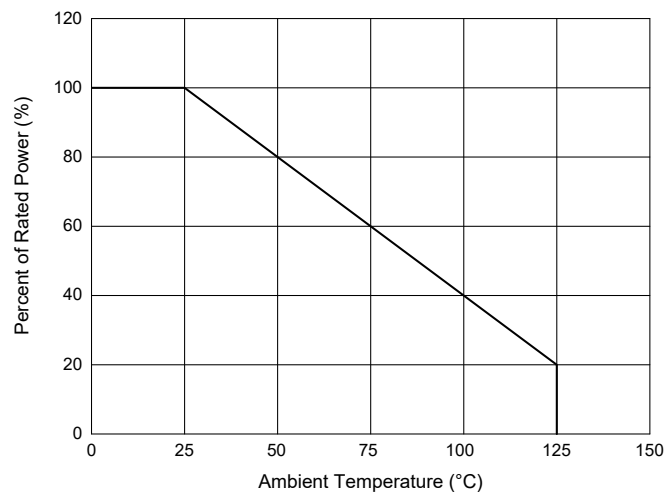


Fig. 6 - Pulse Derating Curve



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

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