

Features

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

Maximum Ratings

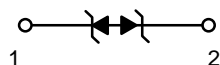
IEC61000-4-2(ESD)	Air	± 30SX
	Contact	± 30SX
Peak Pulse Power (8/20μs)	PPK	84W
Peak Pulse Current (8/20μs)(Note 2)	IPP	6A
Operating Junction Temperature Range	TJ	−55 °C to +125 °C
Storage Temperature Range	TSTG	−55 °C to +125 °C

Note:

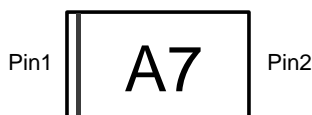
1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

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

Internal Structure

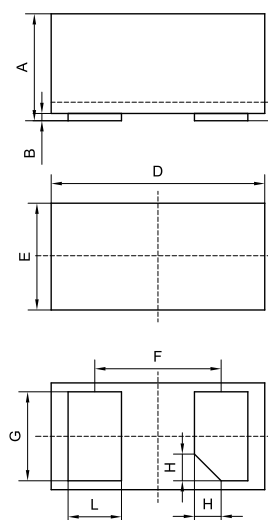


Marking Code



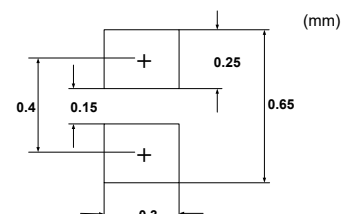
Snap Back ESD Protection Device

0201-A



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	0.10	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}				7	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	7.2		10.5	V
Reverse Holding Voltage	V_{HOLD}	$I_{HOLD} = 50mA$	7.2		10.5	V
Reverse Leakage Current	I_R	$V_{RWM} = 7V$			100	nA
Clamping Voltage ^{Note 2}	V_C	$I_{PP}=16A, t_p=100ns$		12		V
Dynamic Resistance ^{Note 2}	R_{DYN}	TLP, $t_p=100ns$		0.28		Ω
Clamping Voltage ^{Note 3}	V_C	$V_{ESD}=8KV$		12		V
Clamping Voltage ^{Note 4}	V_C	$I_{PP}=1A, t_p=8/20\mu s$		9	11	V
Clamping Voltage ^{Note 4}	V_C	$I_{PP}=6A, t_p=8/20\mu s$		12	14	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$		10	13	pF
Junction Capacitance	C_J	$V_R=2.5V, f=1MHz$		8	11	pF

Note:

1. 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.
2. Contact Discharge Mode, According to IEC61000-4-2.
3. Non-repetitive current pulse 8/20 μs exponential decay waveform according to IEC61000-4-5.

Curve Characteristics

Fig. 1 - 8 X 20 μ s Pulse Waveform

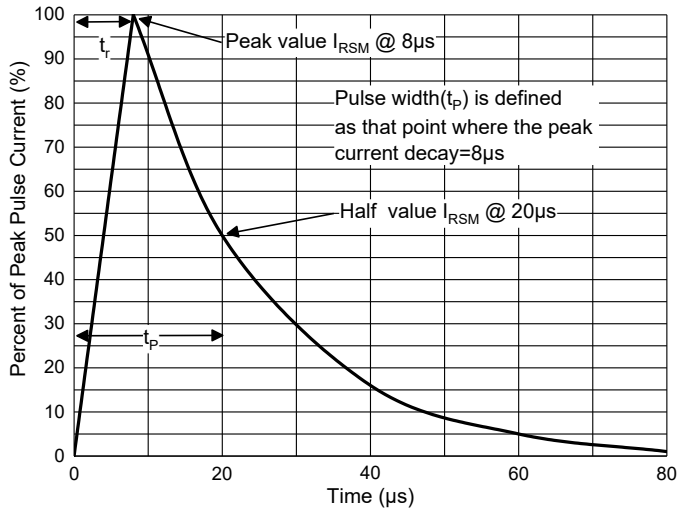


Fig. 2 - Non-Repetitive Peak Pulse Power

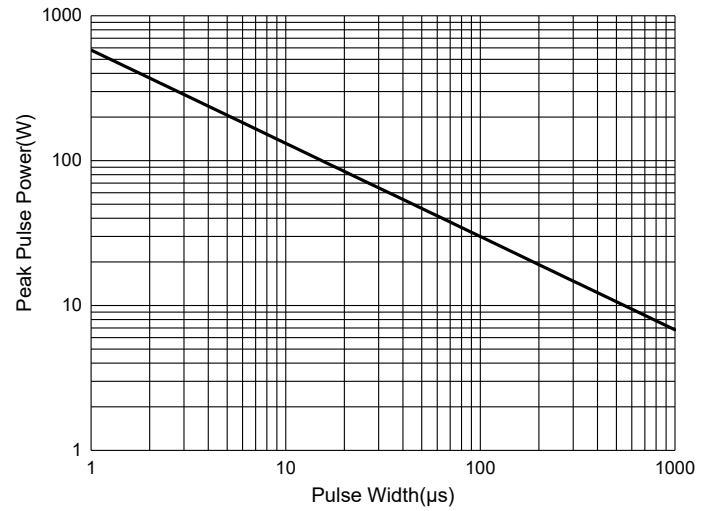


Fig. 3 - Capacitance Characteristics

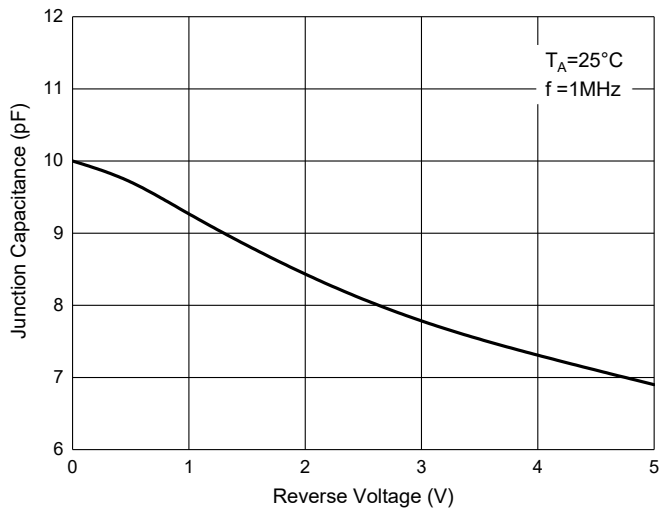


Fig. 4 - Clamping Voltage Characteristics

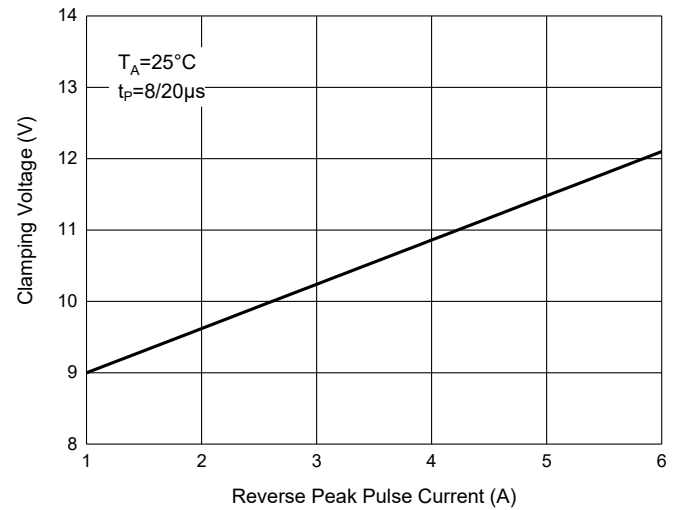


Fig. 5 - TLP Measurement

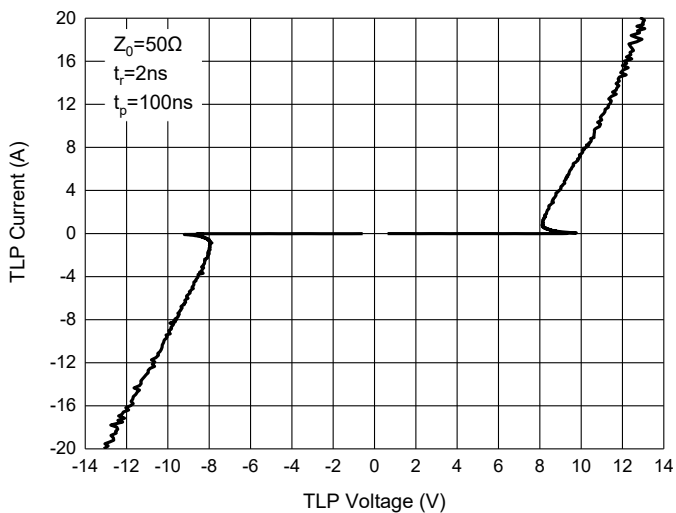
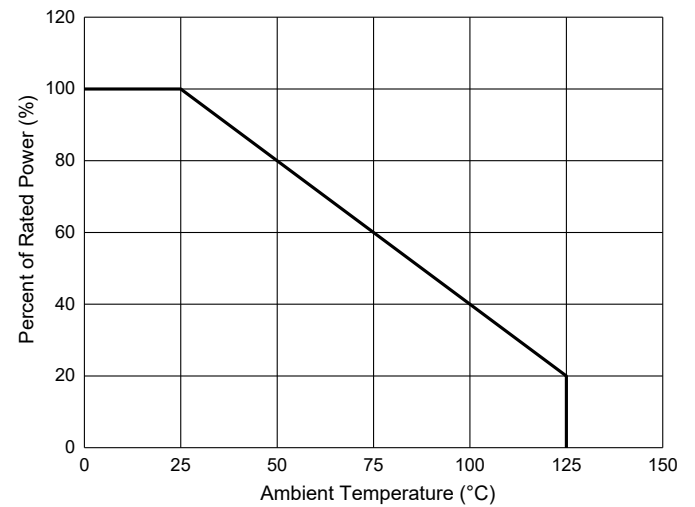


Fig. 6 - Pulse Derating Curve



Ordering Information

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

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