

Features

- Protects One Data or Power Line
- Ultra Low Leakage
- Low Clamping Voltage
- 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	100W
Peak Pulse Current (8/20μs) ^(Note 2)	I _{PP}	12A
Operating Junction Temperature Range	T _J	-55°C to +125°C
Storage Temperature Range	T _{STG}	-55°C to +150°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

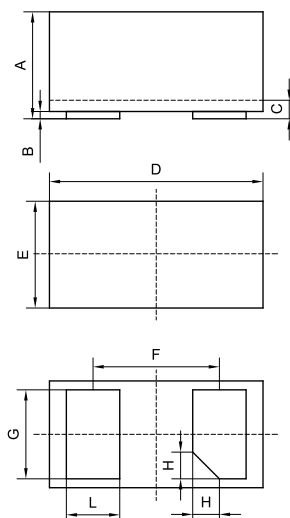


Marking Code

P2

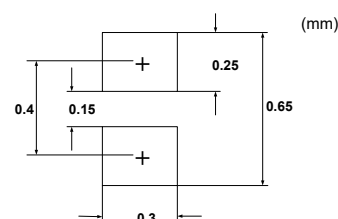
ESD Protection Device

0201-A

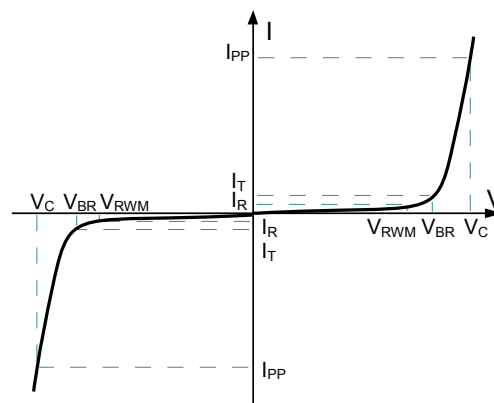


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.009	0.013	0.23	0.33	
B	0.000	0.002	0.00	0.05	
C	0.004	0.007	0.10	0.18	
D	0.022	0.027	0.55	0.67	
E	0.010	0.015	0.25	0.37	
F	0.014		0.355		TYP.
G	0.008	0.011	0.20	0.28	
H	0.003		0.079		TYP.
L	0.004	0.009	0.16	0.22	

SUGGESTED SOLDER PAD LAYOUT



Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
C	Capacitance @ $V_R=0$ and $f=1\text{MHz}$



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	V_{RWM}				1.8	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	2.5			V
Reverse Leakage Current	I_R	$V_{RWM}=1.8\text{V}$			0.2	μA
Clamping Voltage ^{Note1}	V_C	$I_{PP}=1\text{A}$, $t_p=8/20\mu\text{s}$			3.5	V
Clamping Voltage ^{Note1}	V_C	$I_{PP}=12\text{A}$, $t_p=8/20\mu\text{s}$			8.5	V
Junction Capacitance	C_J	$V_R=0\text{V}$, $f=1\text{MHz}$			30	pF

Note:

1. 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

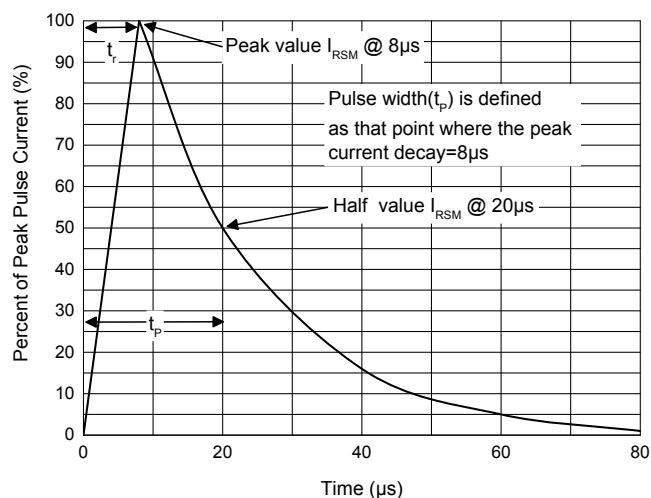


Fig. 2 - Non-Repetitive Peak Pulse Power

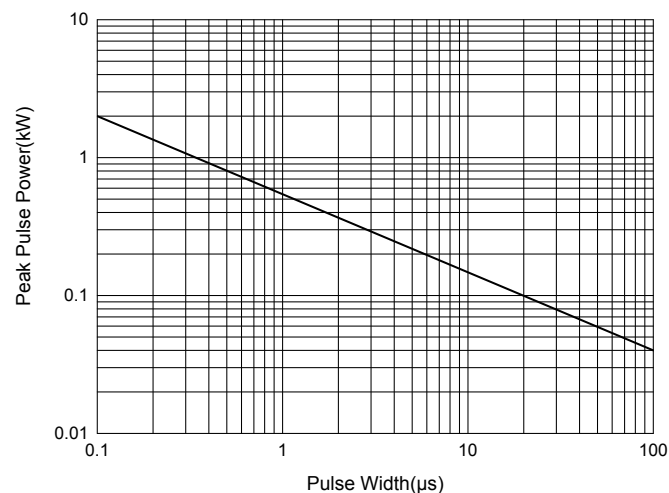


Fig. 3 - Capacitance Characteristics

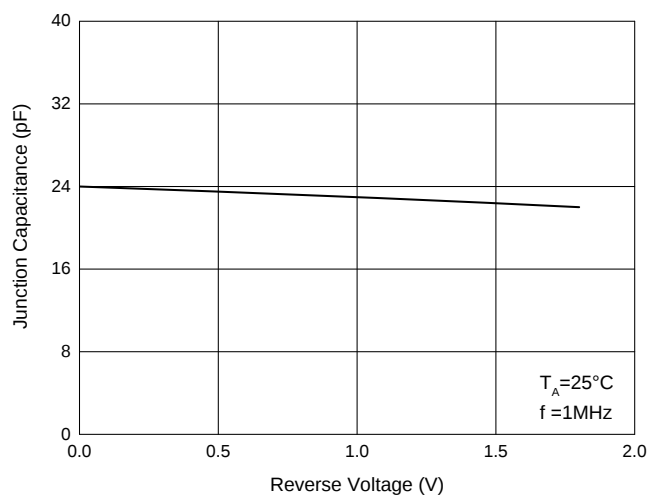


Fig. 4 - Clamping Voltage Characteristics

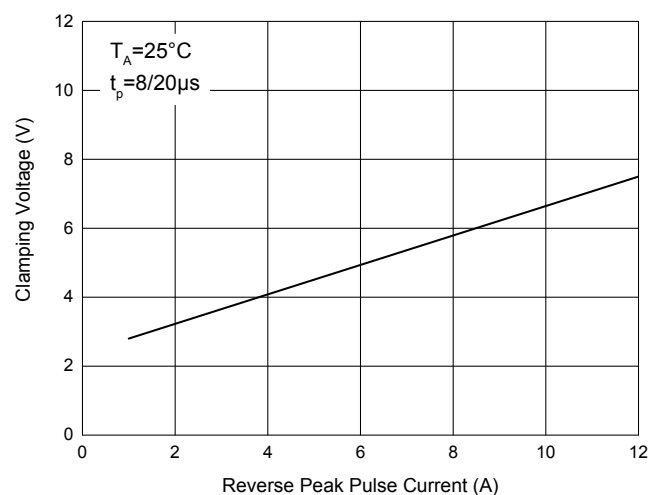
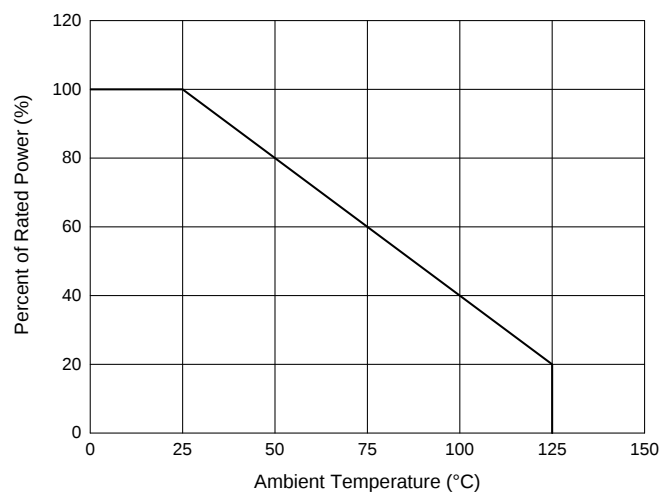


Fig. 5 - Pulse Derating Curve



Ordering Information

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

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