

Features

- Solid-State Silicon Technology
- 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

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESDH3V3AE2	E3

IEC61000-4-2(ESD)	Air Contact	±30KV ±30KV
IEC61000-4-4 (EFT)(5/50ns)		80A
Peak Pulse Current(8/20µs)	I _{PP}	20A
Peak Pulse Power (8/20µs)	P _{PK}	170W

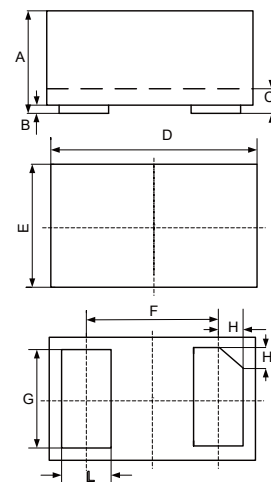
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



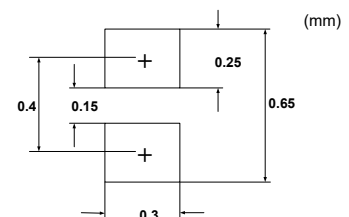
ESD Protection Device

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	0.005	0.007	0.12	0.18	
D	0.022	0.026	0.55	0.65	
E	0.010	0.014	0.25	0.35	
F	0.014		0.355		TYP.
G	0.008	0.011	0.22	0.28	
H	0.003		0.079		TYP.
L	0.006	0.009	0.16	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}				3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	3.5	4		V
Reverse Holding Voltage	V_{HOLD}	$I_{HOLD}=50mA$	3.5	4		V
Reverse Leakage Current	I_R	$V_{RWM}=3.3V$			0.1	μA
Clamping Voltage	V_C	$I_{PP}=1A, t_p=8/20\mu s$			5.5	V
Clamping Voltage	V_C	$I_{PP}=10A, t_p=8/20\mu s$			7	V
Clamping Voltage	V_C	$I_{PP}=20A, t_p=8/20\mu s$			8.5	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$		35	45	pF
Junction Capacitance	C_J	$V_R=2.5V, f=1MHz$		25	35	pF

Curve Characteristics

Fig. 1 - 8 X 20 μ s Pulse Waveform

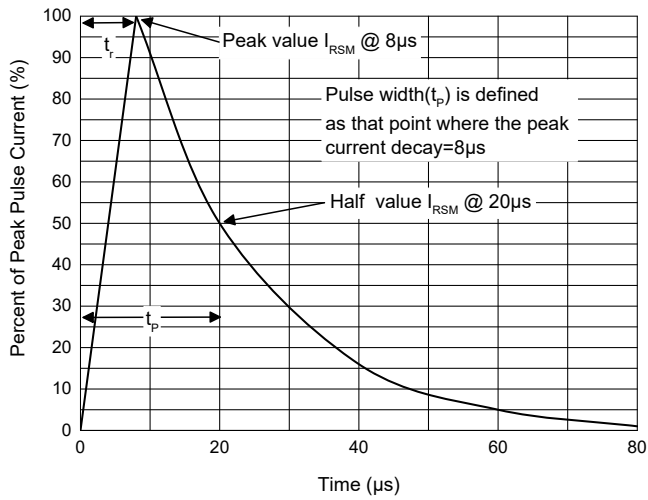


Fig. 2 - Non-Repetitive Peak Pulse Power

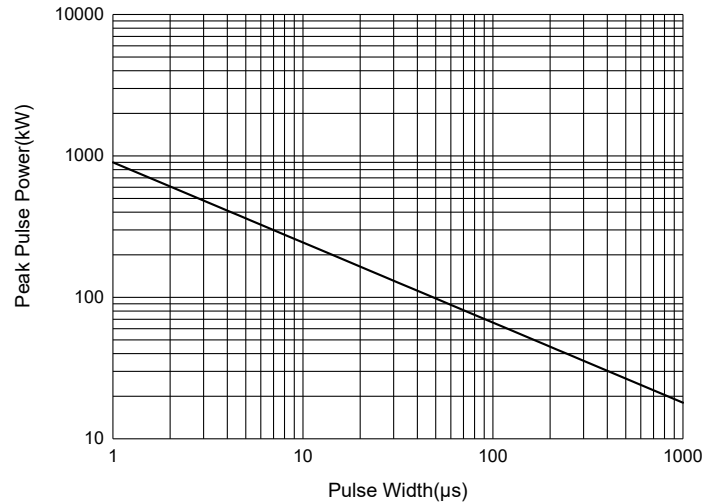


Fig. 3 - Capacitance Characteristics

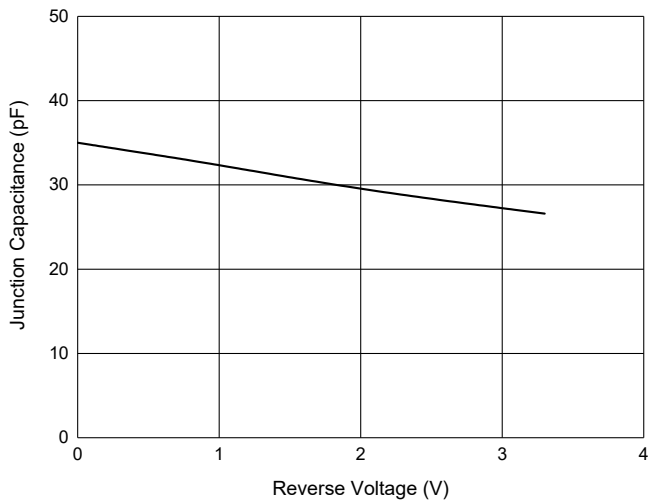


Fig. 4 - Clamping Voltage Characteristics

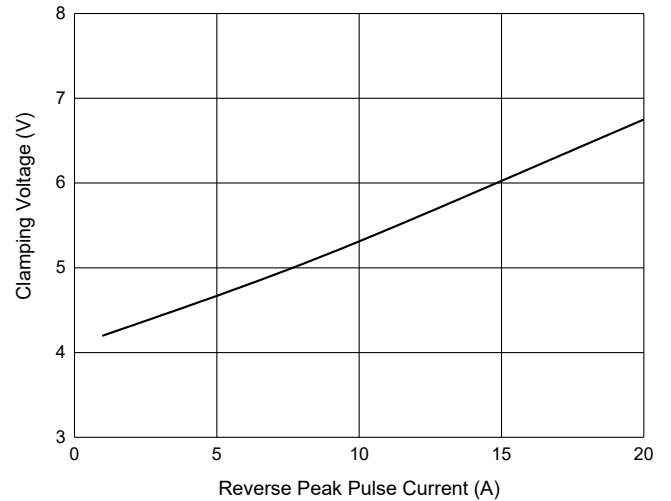


Fig. 5 - Pulse Derating Curve

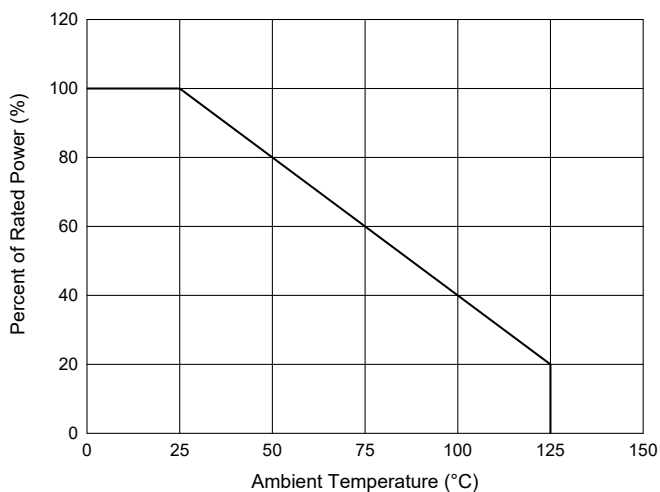
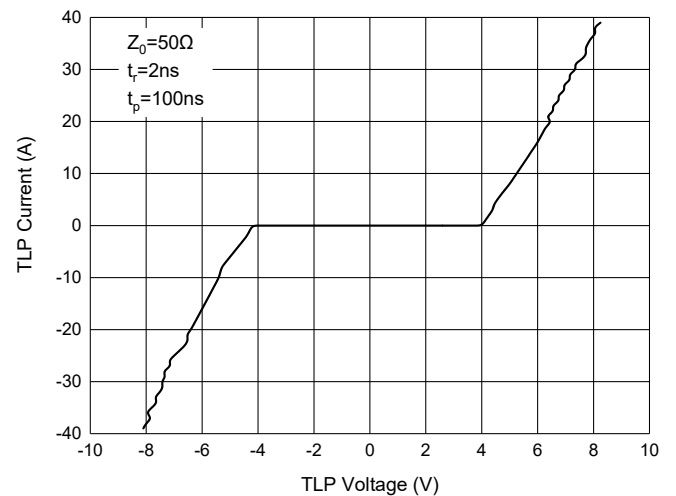


Fig. 6 - TLP Measurement



Ordering Information

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

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