

### **Features**

- Solid-state Silicon technology
- · Ultra Low Capacitance
- · Ultra 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**

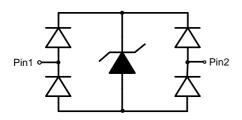
- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking		
ESDSBSLC3V3AE2	U3		

IEC61000-4-2(ESD)	Air Contact	±30KV ±30KV
Peak Pulse Current(8/20µs)	I <sub>PP</sub>	4A
Peak Pulse Power (8/20µs)	P <sub>PK</sub>	34W

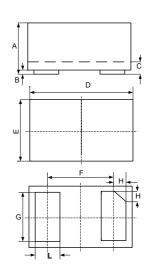
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

#### **Internal Structure**



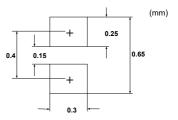
# Snap Back ESD Protection Device

# 0201-A



DIMENSIONS					
DIM	INCHES		MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	NOTE
Α	0.009	0.013	0.23	0.33	
В	0.000	0.002	0.00	0.05	
С	0.005	0.007	0.12	0.18	
D	0.022	0.026	0.55	0.65	
Е	0.010	0.014	0.25	0.35	
F	0.014		0.355		TYP.
G	0.008	0.011	0.22	0.28	
Н	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)

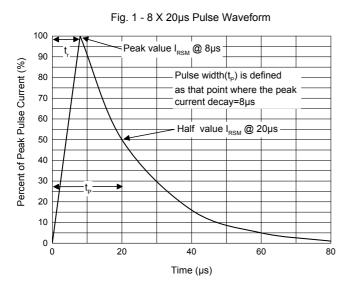
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Working Voltage	$V_{RWM}$				3.3	V
Reverse Breakdown Voltage	$V_{BR}$	I <sub>T</sub> = 1mA	7	10		V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =3.3V		<1	50	nA
Clamping Voltage <sup>(Note 2)</sup>	V <sub>C</sub>	I <sub>PP</sub> =16A, t <sub>P</sub> =100ns		9		V
Dynamic Resistance <sup>(Note 2)</sup>	R <sub>DYN</sub>			0.25		Ω
Clamping Voltage <sup>(Note 3)</sup>	V <sub>C</sub>	V <sub>ESD</sub> =8KV		9		V
Clamping Voltage <sup>(Note 4)</sup>	V <sub>C</sub>	I <sub>PP</sub> =1A, t <sub>P</sub> =8/20μs		4.5	5.5	V
Clamping Voltage <sup>(Note 4)</sup>	V <sub>C</sub>	I <sub>PP</sub> =4A, t <sub>P</sub> =8/20μs		7	8.5	V
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1MHz		0.35	0.5	pF

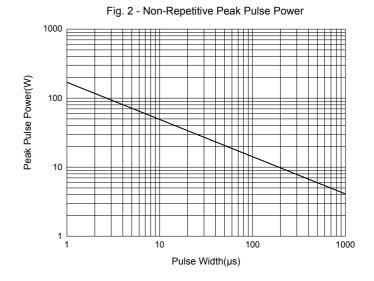
## Note:

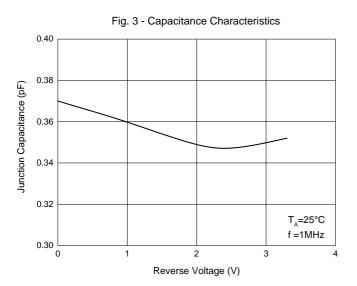
- $2.\ .\ TLP\ Parameter: Z_0=50\Omega,\ t_p=100ns,\ t_r=2ns,\ Averaging\ Window\ from\ 60ns\ to\ 80ns.\ R_{DYN}\ is\ Calculated\ from\ 4A\ to\ 16A.$
- 3. . Contact Discharge Mode, According to IEC61000-4-2.
- 4. . Non-repetitive Current Pulse, According to IEC61000-4-5.

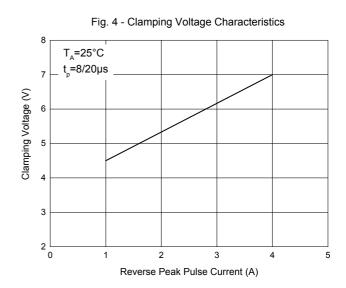


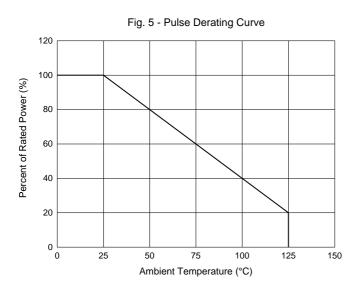
## **Curve Characteristics**













# **Ordering Information**

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

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