

**Features**

- Ultra Low Capacitance
- 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	
ESDSL5V0AE2	ZZ	
IEC61000-4-2(ESD)	Air Contact	±20KV ±20KV
Maximum Reverse Peak Pulse Current (8/20us)	I <sub>PP</sub>	5A
Peak Pulse Power (8/20us Waveform)	P <sub>PK</sub>	125W

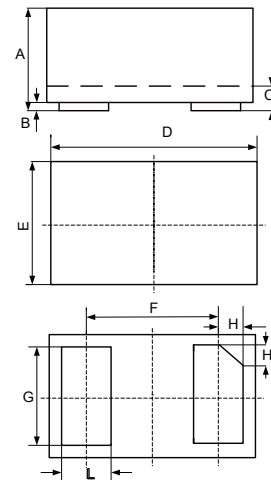
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

**Pin Configuration**



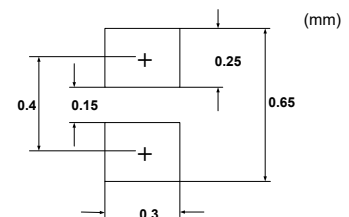
**ESD Protection Device**

**0201-A**



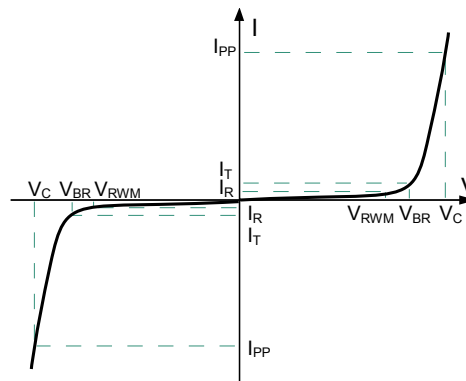
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.009	0.013	0.23	0.33	
B	0.000	0.002	0.00	0.05	
C	0.005	0.007	0.12	0.18	
D	0.022	0.026	0.55	0.65	
E	0.010	0.014	0.25	0.35	
F	0.014		0.355		TYP.
G	0.008	0.011	0.22	0.28	
H	0.003		0.079		TYP.
L	0.006	0.009	0.16	0.22	

**SUGGESTED SOLDER PAD LAYOUT**



**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

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	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1\text{mA}$	6.5		9.5	V
Reverse Leakage Current	$I_R$	$V_{RWM}=5\text{V}$		0.02	0.1	$\mu\text{A}$
Clamping Voltage <sup>(Note 2)</sup>	$V_C$	$I_{PP}=8\text{A}, t_p=100\text{ns}$		21		V
Clamping Voltage <sup>(Note 2)</sup>	$V_C$	$I_{PP}=16\text{A}, t_p=100\text{ns}$		30		V
Clamping Voltage	$V_C$	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$			12	V
Clamping Voltage	$V_C$	$I_{PP}=5\text{A}, t_p=8/20\mu\text{s}$			25	V
Junction Capacitance	$C_J$	$V_R=0\text{V}, f=1\text{MHz}$		0.26	0.32	pF

Note:

2. TLP Parameter:  $Z_0=50\Omega, t_p=100\text{ns}, t_r=2\text{ns}$ , Averaging Window from 60ns to 80ns.  $R_{DYN}$  is Calculated from 4A to 16A.

Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

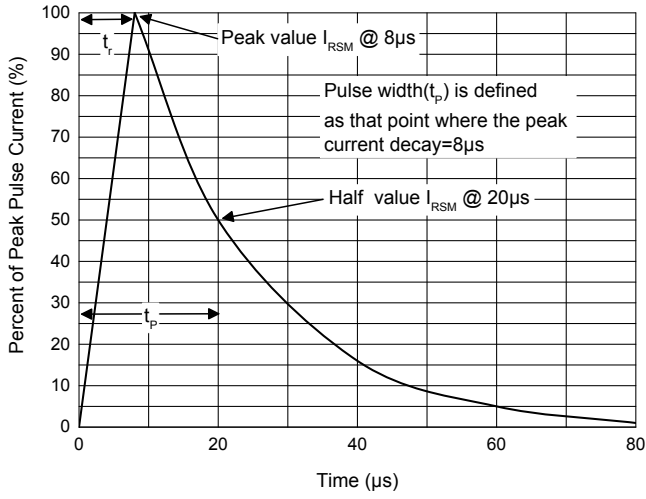


Fig. 2 - Pulse Derating Curve

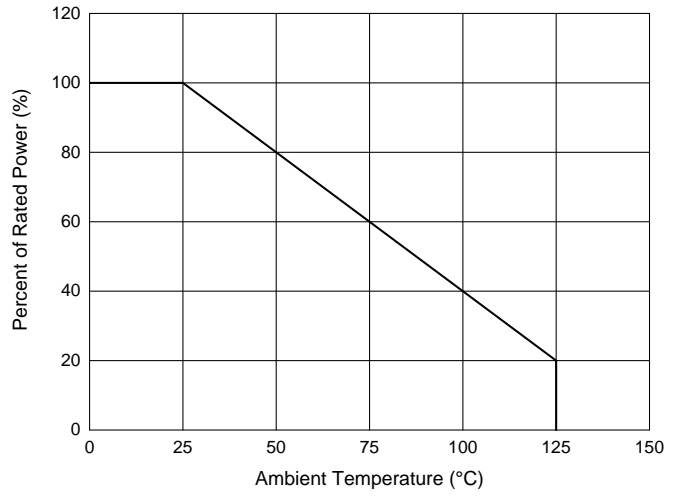


Fig. 3 - Capacitance Characteristics

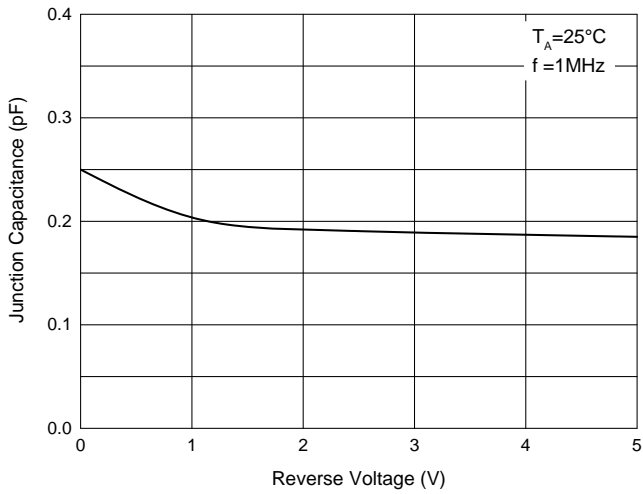


Fig. 4 - Clamping Voltage Characteristics

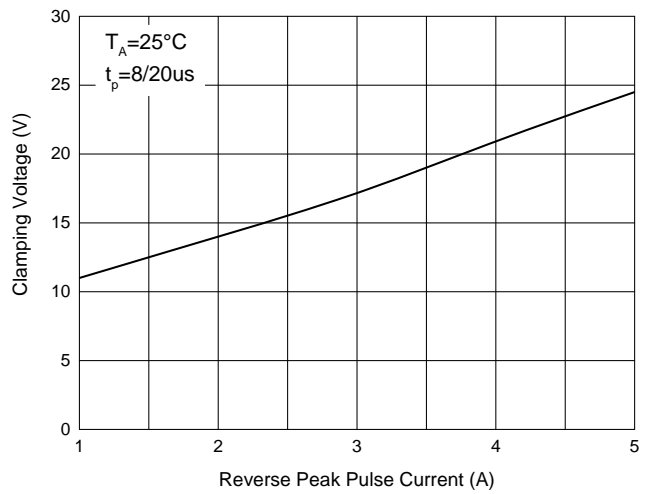


Fig. 5 - TLP Measurement

