

Features

- Uni-Directional ESD Protection of Four Lines
- Low Reverse Stand-Off Voltage
- Low Reverse 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

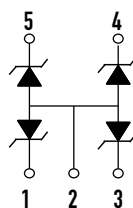
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESDLC3V0L4	5P

IEC61000-4-2(ESD)	Air Contact	±9KV ±8KV
JESD22-A114-B(ESD)	Human Body Machine	15KV 0.4KV
IEC61000-4-4 (EFT) @5/50ns		40A
Peak Pulse Current(8/20µs)	I _{PP}	2.5A
Peak Pulse Power (8/20us)	P _{PK}	20W

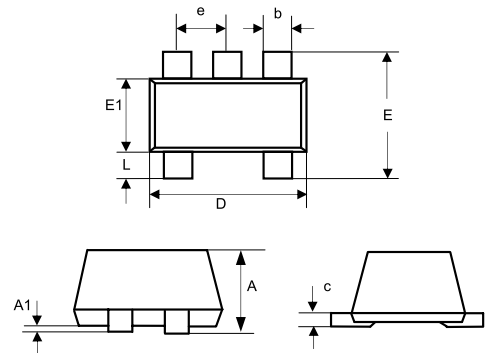
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



ESD Protection Device

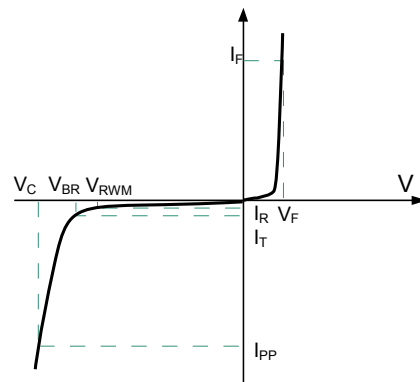
SOT-553



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.021	0.024	0.525	0.60	
A1	0.000	0.002	0.00	0.05	
e	0.018	0.022	0.45	0.55	
c	0.004	0.006	0.09	0.16	
D	0.059	0.067	1.50	1.70	
b	0.007	0.011	0.17	0.27	
E1	0.040	0.051	1.10	1.30	
E	0.059	0.067	1.50	1.70	
L	0.004	0.012	0.10	0.30	

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

Symbol	Parameter
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
P_{PP}	Peak Pulse Power
C_J	Junction Capacitance
I_F	Forward Current
V_F	Forward Voltage @ I_F



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	V_{RWM}				3	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$	5		5.9	V
Reverse Leakage Current	I_R	$V_{RWM} = 3\text{V}$			1	μA
Forward Voltage	V_F	$I_F = 10\text{mA}$			0.9	V
Clamping Voltage	V_C	$I_{PP} = 2.5\text{A}$, $t_p = 8/20\mu\text{s}$			8	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$		9		pF

Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

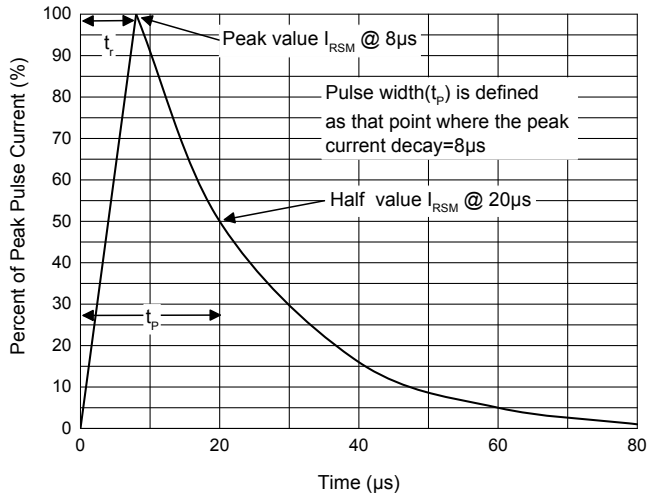


Fig. 2 - Pulse Derating Curve

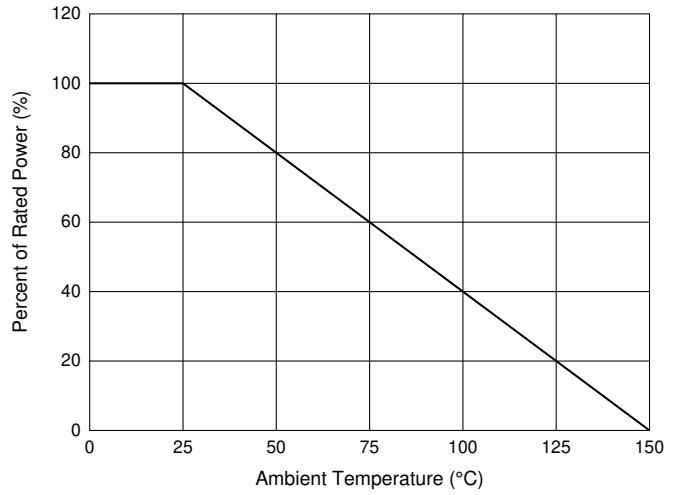


Fig. 3 - Capacitance Characteristics

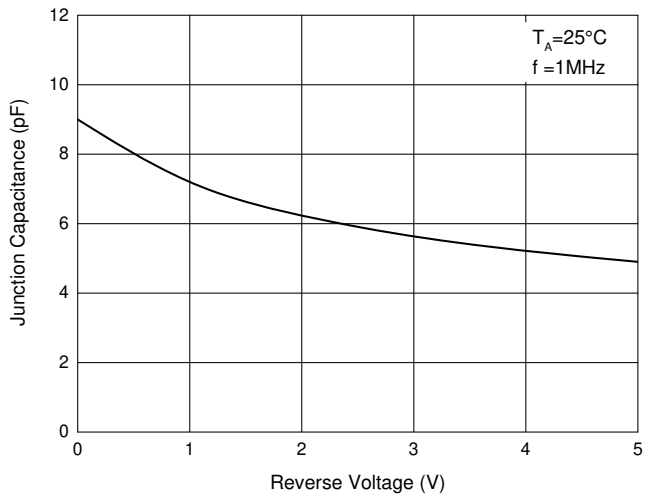
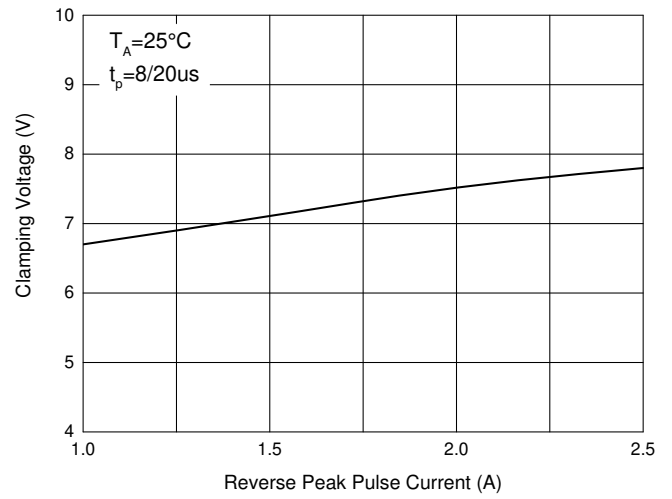


Fig. 4 - Clamping Voltage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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