

Features

- Four Separate Unidirectional Configurations for Protection
- Excellent Clamping Capability
- Low Leakage
- Low Capacitance
- 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
- Maximum Thermal Resistance: 833°C/W Junction to Ambient

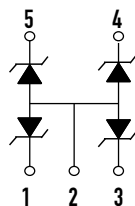
MCC Part Number	Device Marking
ESDLC5V0L4	5H

Peak Pulse Current(8/20µs)	I_{PP}	1.6A
Peak Pulse Power (8/20us)	P_{PK}	20W
Power Dissipation ⁽²⁾	P_D	150mW

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

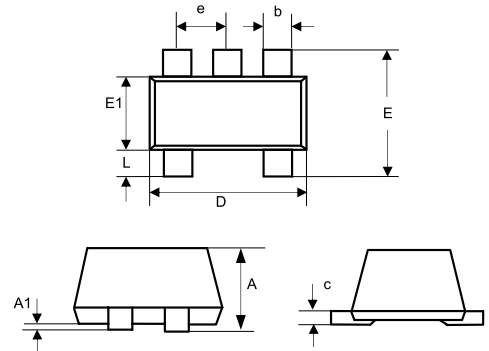
Note 2. Only 1 Diode under Power. For All 4 Diodes under Power, PD Will Be 25%. Mounted on FR-4 Board with Min Pad.

Internal Structure



ESD Protection Device

SOT-553



DIM	INCHES		MM		NOTE
	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 @ 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	6.5	7.2	V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$			1	μA
Forward Voltage	V_F	$I_F = 10\text{mA}$			0.9	V
Clamping Voltage	V_C	$I_{PP} = 1.6\text{A}$, $t_P = 8/20\mu\text{s}$			11	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$			14	pF
Junction Capacitance	C_J	$V_R = 3\text{V}$, $f = 1\text{MHz}$			11.5	pF

Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

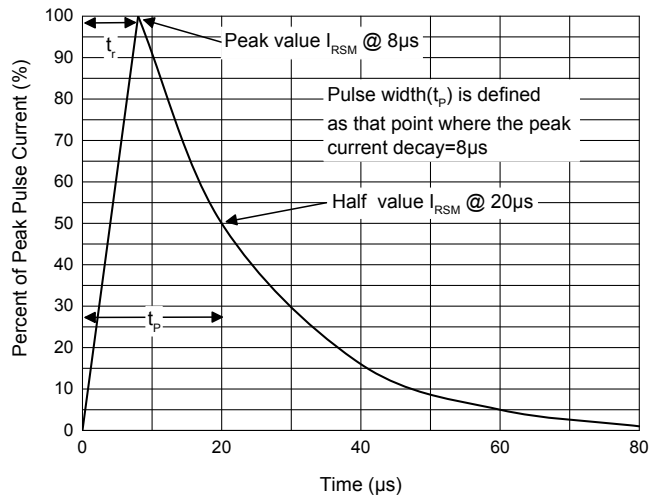
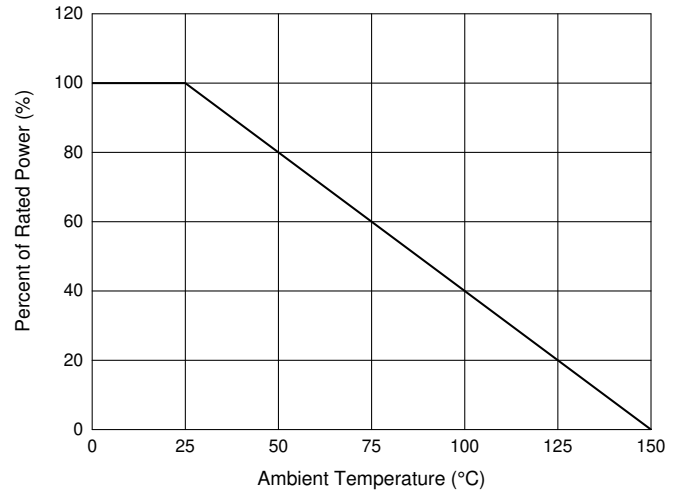


Fig. 2 - Pulse Derating Curve



Ordering Information

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

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