

## 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

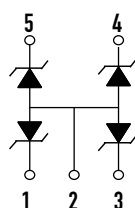
| MCC Part Number | Device Marking |
|-----------------|----------------|
| ESDLC5V0L4      | 5H             |

|                                  |          |       |
|----------------------------------|----------|-------|
| Peak Pulse Current(8/20μs)       | $I_{PP}$ | 1.6A  |
| Peak Pulse Power (8/20us)        | $P_{PK}$ | 20W   |
| Power Dissipation <sup>(2)</sup> | $P_D$    | 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.

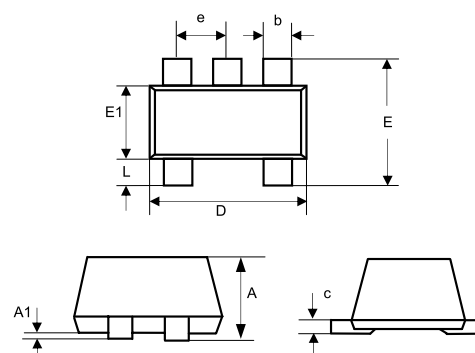
Note 2. Only 1 Diode under Power. For All 4 Diodes under Power, PD Will Be 25%. Mounted on FR-4 Board with Min Pad.

## 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 | $V_{BR}$  | $I_T = 1mA$                      | 6    | 6.5  | 7.2  | V       |
| Reverse Leakage Current   | $I_R$     | $V_{RWM} = 5V$                   |      |      | 1    | $\mu A$ |
| Forward Voltage           | $V_F$     | $I_F = 10mA$                     |      |      | 0.9  | V       |
| Clamping Voltage          | $V_C$     | $I_{PP} = 1.6A, t_P = 8/20\mu s$ |      |      | 11   | V       |
| Junction Capacitance      | $C_J$     | $V_R = 0V, f = 1MHz$             |      |      | 14   | pF      |
| Junction Capacitance      | $C_J$     | $V_R = 3V, f = 1MHz$             |      |      | 11.5 | pF      |

## Curve Characteristics

Fig. 1 - 8 X 20 $\mu$ s Pulse Waveform

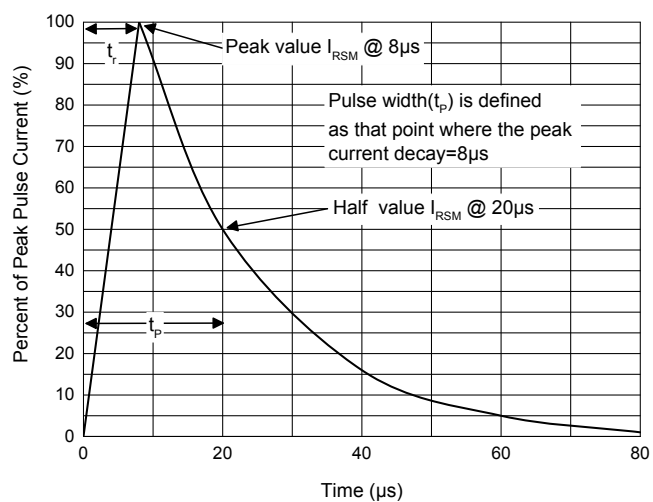
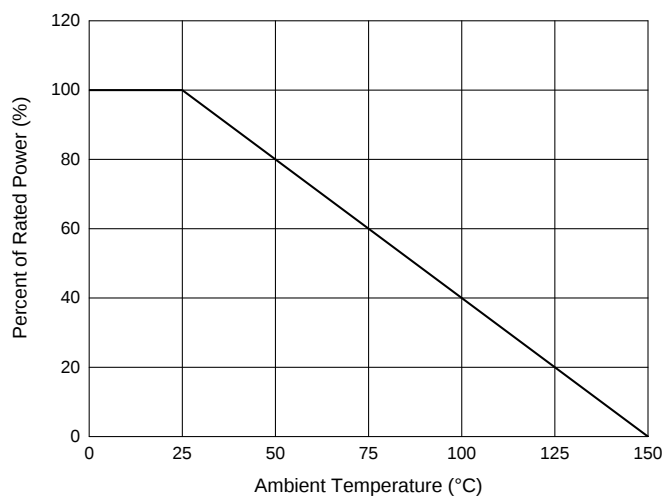


Fig. 2 - Pulse Derating Curve



## Ordering Information

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

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