

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

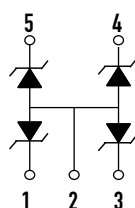
| MCC Part Number | Device Marking |
|-----------------|----------------|
| ESDLC5V0L4 | 5H |

| | | |
|----------------------------------|----------|-------|
| 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.

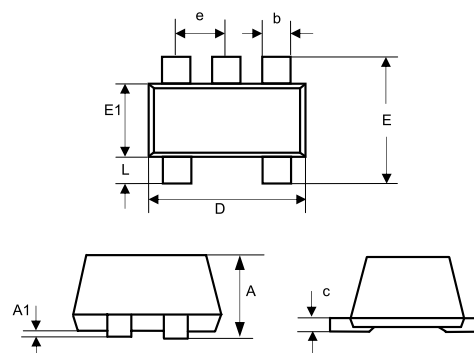
Note 2. Only 1 Diode under Power. For All 4 Diodes under Power, PD Will Be 25%. Mounted on FR-4 Board with Min Pad.

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)

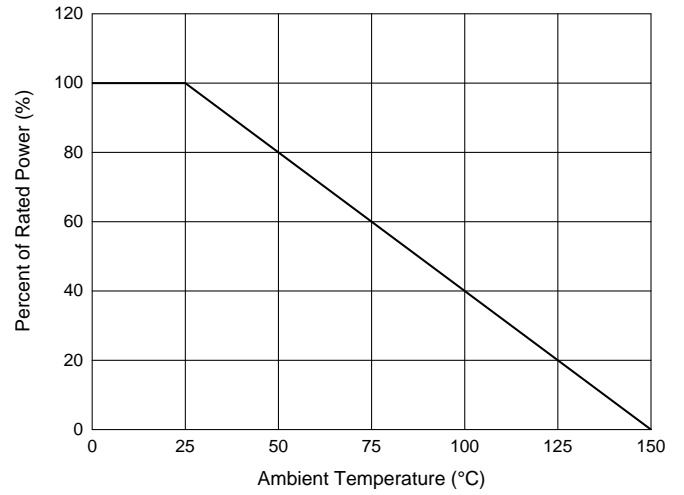
| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Units |
|---------------------------|-----------|--|------|------|------|---------------|
| Reverse Working Voltage | V_{RWM} | | | | 5 | V |
| Reverse Breakdown Voltage | V_{BR} | $I_T = 1\text{mA}$ | 6 | 6.5 | 7.2 | V |
| Reverse Leakage Current | 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 20 μ s Pulse Waveform



Fig. 2 - Pulse Derating Curve



Ordering Information

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

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