



## SLVU2.8

## 2.8Volts ESD Protection Devices

### Features

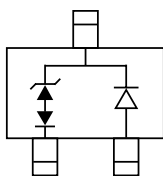
- Halogen free available upon request by adding suffix "-HF"
- For sensitive ESD protection
- Stand-off Voltage: 2.8V
- Low leakage
- Low clamping voltage
- 500W peak pulse power (tp=8/20us)
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings

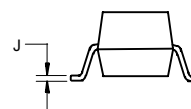
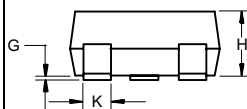
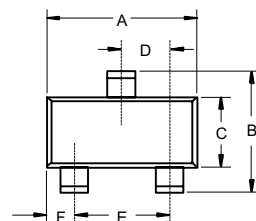
- Operating Junction Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C

| Parameter                     | Symbol | Limits              | unit |
|-------------------------------|--------|---------------------|------|
| IEC61000-4-2(ESD) Air Contact |        | $\pm 15$<br>$\pm 8$ | KV   |
| IEC61000-4-5(lightning)       |        | 24                  | A    |
| Peak Pulse Power              | Pd     | 500                 | W    |

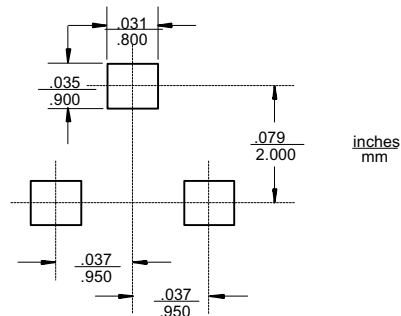
### Pin Configuration-Top View



### SOT-23



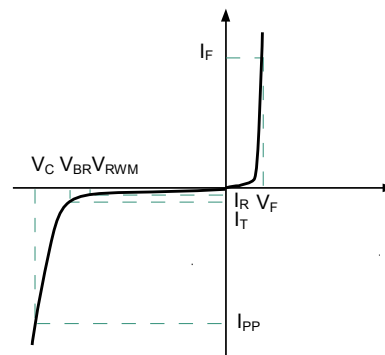
| DIM | INCHES |       | MM   |      | NOTE |
|-----|--------|-------|------|------|------|
|     | MIN    | MAX   | MIN  | MAX  |      |
| A   | .110   | .120  | 2.80 | 3.04 |      |
| B   | .083   | .104  | 2.10 | 2.64 |      |
| C   | .047   | .055  | 1.20 | 1.40 |      |
| D   | .035   | .041  | .89  | 1.03 |      |
| E   | .070   | .081  | 1.78 | 2.05 |      |
| F   | .018   | .024  | .45  | .60  |      |
| G   | .0005  | .0039 | .013 | .100 |      |
| H   | .035   | .044  | .89  | 1.12 |      |
| J   | .003   | .007  | .085 | .180 |      |
| K   | .015   | .020  | .37  | .51  |      |



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

**UNIDIRECTIONAL** (Circuit tied to Pins 1 and 3 or 2 and 3)

| 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                                |
| $I_F$     | Forward Current                             |
| $V_F$     | Forward Voltage @ $I_F$                     |
| $P_{pk}$  | Peak Power Dissipation                      |
| $C$       | Capacitance @ $V_R=0$ and $f=1\text{MHz}$   |



**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted,  $V_F = 0.9\text{ V Max.}$  @  $I_F = 10\text{mA}$  for all types)

| Device  | $V_{RWM}$ (V) | $I_R$ ( $\mu$ A )<br>@ $V_{RWM}$ | $V_{BR}$ (V)<br>@ $I_T$ (Note 2) |     | $I_T$ | $V_C$<br>@ $I_{PP}=1\text{ A}$ | $V_C$<br>@ $I_{PP}=5\text{A}$ | $P_{pk}^+$ (W) | $C$ (pF)<br>Pin 1 to 3 |
|---------|---------------|----------------------------------|----------------------------------|-----|-------|--------------------------------|-------------------------------|----------------|------------------------|
|         | Max           | Max                              | Min                              | Typ | mA    | V                              | V                             | Max            | Typ                    |
| SLVU2.8 | 2.8           | 1.0                              | 3.0                              | 4.0 | 1.0   | 5                              | 8                             | 500            | 13                     |

$V_{BR}$  is measured with a pulse test current  $I_T$  at ambient temperature of  $25^\circ\text{C}$ .

## TYPICAL CHARACTERISTICS

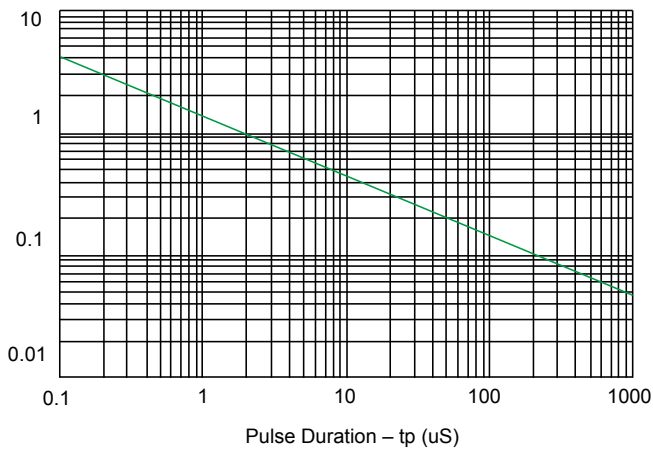


Fig1. Non-Repetitive Peak Pulse Power vs. Pulse time

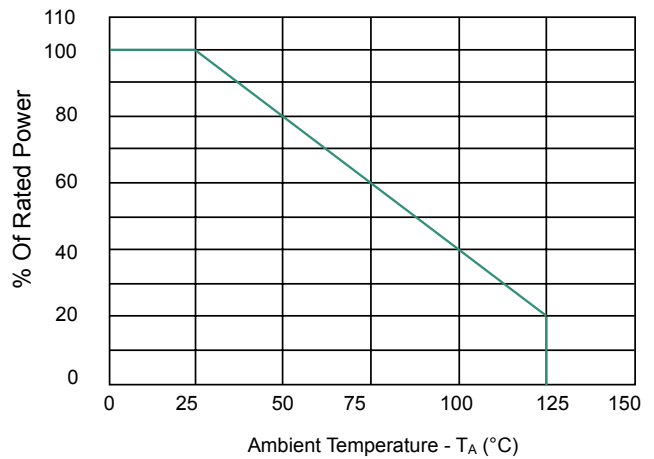


Fig2. Power Derating Curve

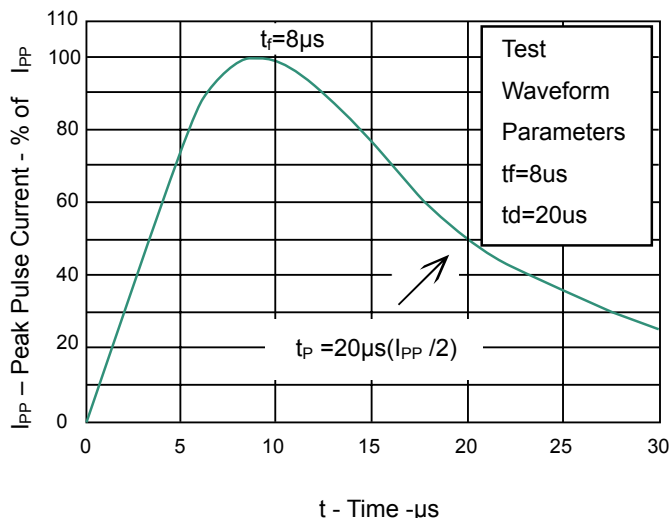


Fig 3. Pulse Waveform



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## Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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