



Micro Commercial Components



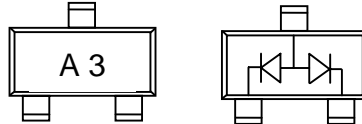
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# 1SS181

## Features

- Low Forward Voltage
- Low Leakage Current
- Surface Mount SOT-23 Package
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Pin Configuration  
Top View



## Maximum Ratings

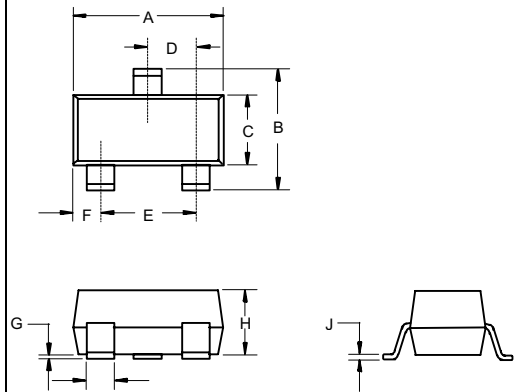
|  |           |   |
|--|-----------|---|
| Reverse Voltage                            | $V_R$     | 80V   |
| Forward Current                            | $I_F$     | 100mA                                       |
| Surge Current (10ms)                       | $I_{FSM}$ | 2.0A  |
| Power Dissipation @ $T_A=25^\circ\text{C}$ | $P_D$     | 150mW                                       |
| Storage Temperature Range                  | $T_{stg}$ | $-55^\circ\text{C}$ to $+150^\circ\text{C}$ |
| Junction Temperature                       | $T_j$     | $150^\circ\text{C}$                         |

## Electrical Characteristics @ $25^\circ\text{C}$ Unless Otherwise Specified

|   |            |                  |   |
|---|------------|------------------|---|
| Minimum Reverse Breakdown Voltage       | $V_{(BR)}$ | 80V              | $I_R=100\mu\text{A}$<br>$T_A = 25^\circ\text{C}$  |
| Maximum Forward Voltage                 | $V_F$      | 1.2V             | $I_F = 100\text{mA};$<br>$T_A = 25^\circ\text{C}$ |
| Maximum Reverse Voltage Leakage Current | $I_R$      | $0.5\mu\text{A}$ | $V_R=80\text{Volts}$<br>$T_A = 25^\circ\text{C}$  |
| Maximum Diode Capacitance               | $C_D$      | $4.0\text{pF}$   | Measured at<br>$f=1.0\text{MHz}, V_R=0$           |
| Maximum Reverse Recovery Time           | $t_{rr}$   | $4.0\text{ns}$   | $I_F = 10\text{mA}$                               |

## 150mW High Speed Switching Diodes 80 Volt

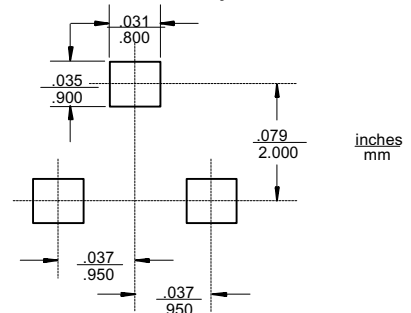
### SOT-23



DIMENSIONS

| 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  |      |

### Suggested Solder Pad Layout





TM

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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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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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