## Features

- High Speed Switching Diode
- Fast Switching Speed
- For General Purpose Switching Applications
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)


## Maximum Ratings

- Operating Junction Temperature Range: $-65^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$
- Storage Temperature Range: $-65^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$

| MCC <br> Part Number | Device Marking |
| :---: | :---: |
| 1SS355 | A |


| Parameter | Symbol | Value |
| :--- | :---: | :---: |
| Peak Repetitive Reverse Voltage | $\mathrm{V}_{\mathrm{RRM}}$ | 90 V |
| DC Reverse Voltage | $\mathrm{V}_{\mathrm{R}}$ | 80 V |
| RMS Reverse Voltage | $\mathrm{V}_{\mathrm{R}(\mathrm{RMS})}$ | 63 V |
| Forward Continuous Current | $\mathrm{I}_{\mathrm{FM}}$ | 150 mA |
| Peak Forward Surge Current | $\mathrm{I}_{\mathrm{FSM}}$ | 0.5 A |

## 90 Volt Switching Diode

SOD-323


| DIMENSIONS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DIM | INCHES |  | MM |  | NOTE |
|  | MIN | MAX | MIN | MAX |  |
| A | 0.090 | 0.107 | 2.30 | 2.70 |  |
| B | 0.063 | 0.071 | 1.60 | 1.80 |  |
| C | 0.045 | 0.053 | 1.15 | 1.35 |  |
| D | 0.031 | 0.045 | 0.80 | 1.15 |  |
| E | 0.010 | 0.016 | 0.25 | 0.40 |  |
| G | 0.004 | 0.018 | 0.10 | 0.45 |  |
| H | 0.004 | 0.010 | 0.10 | 0.25 |  |
| J | ----- | 0.006 | ---- | 0.15 |  |

Suggested Solder Pad Layout


Electrical Characteristics @ $25^{\circ} \mathrm{C}$ (Unless Otherwise Specified)

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Units |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Forward Voltage | $\mathrm{V}_{\mathrm{F}}$ | $\mathrm{I}_{\mathrm{F}}=100 \mathrm{~mA}$ |  |  | 1.2 | V |
| Reverse Current | $\mathrm{I}_{\mathrm{R}}$ | $\mathrm{V}_{\mathrm{R}}=80 \mathrm{~V}$ |  |  | 0.1 | $\mu \mathrm{~A}$ |
| Junction Capacitance | $\mathrm{C}_{J}$ | $\mathrm{~V}_{\mathrm{R}}=6 \mathrm{~V}, \mathrm{f}=1 \mathrm{MHz}$ |  | 3 |  | pF |
| Reverse Recovery Time | $\mathrm{t}_{\mathrm{r}}$ | $\mathrm{I}_{\mathrm{F}}=\mathrm{I}_{\mathrm{R}}=10 \mathrm{~mA}$, <br> $\mathrm{I}_{\mathrm{rr}}=0.1 \times \mathrm{I}_{\mathrm{R}}, \mathrm{R}_{\mathrm{L}}=100 \Omega$ |  |  | 4 | ns |

* Pulse Test: Pulse Width $300 \mu \mathrm{sec}$, Duty Cycle 2\%


## Curve Characteristics

Fig. 1 - Forward Characteristics


Fig. 2 - Reverse Characteristics


Fig. 3 - Power Derating Curve


## 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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