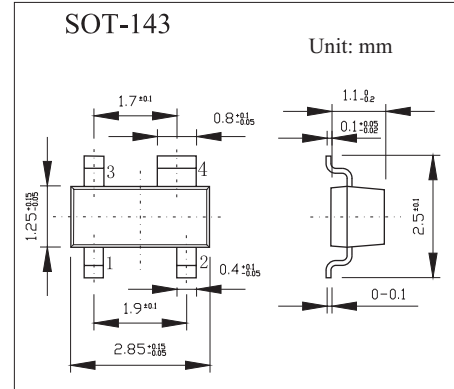


## Silicon Epitaxial Planar Type

## 1SS306

## ■ Features

- Low forward voltage :  $V_{F(2)} = 0.9 \text{ V(Typ)}$
- Fast reverse recovery time :  $t_{rr} = 30 \text{ ns (Typ)}$
- Small total capacitance :  $C_T = 1.5 \text{ pF(Typ)}$

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

| Parameter                        | Symbol    | Rating    | Unit             |
|----------------------------------|-----------|-----------|------------------|
| Maximum (peak) reverse voltage   | $V_{RM}$  | 250       | V                |
| Reverse voltage                  | $V_R$     | 200       | V                |
| Average forward current *        | $I_O$     | 100       | mA               |
| Maximum (peak) forward current * | $I_{FM}$  | 300       | mA               |
| Surge current (10 ms) *          | $I_{FSM}$ | 2         | A                |
| Power dissipation                | P         | 150       | mW               |
| Junction Temperature             | $T_j$     | 125       | $^\circ\text{C}$ |
| Storage Temperature              | $T_{stg}$ | -55 + 125 | $^\circ\text{C}$ |

\* Unit rating. Total rating = Unit rating X1.5

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

| Parameter             | Symbol     | Test Conditions                | Min | Typ  | Max | Unit          |
|-----------------------|------------|--------------------------------|-----|------|-----|---------------|
| Forward voltage       | $V_{F(1)}$ | $I_F = 1 \text{ mA}$           |     | 0.72 | 1.0 | V             |
|                       | $V_{F(2)}$ | $I_F = 100 \text{ mA}$         |     | 0.9  | 1.2 |               |
| Reverse current       | $I_{R(1)}$ | $V_R = 50 \text{ V}$           |     |      | 0.1 | $\mu\text{A}$ |
|                       | $I_{R(2)}$ | $V_R = 200 \text{ V}$          |     |      | 1.0 |               |
| Total capacitance     | $C_t$      | $V_R = 0, f = 1.0 \text{ MHz}$ |     | 1.5  | 3.0 | pF            |
| Reverse recovery time | $t_{rr}$   |                                |     | 30   | 60  | ns            |

## ■ Marking

|         |    |
|---------|----|
| Marking | A3 |
|---------|----|