

1SS355-HAF

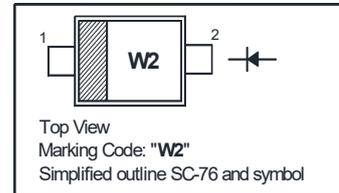
Silicon Epitaxial Planar Switching Diode

Features

- Small plastic package suitable for surface mounted design
- High reliability with high surge current handling capability
- Halogen and Antimony Free(HAF), RoHS compliant

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



Applications

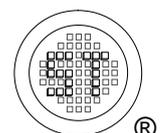
- High speed switching

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

| Parameter | Symbol | Value | Unit |
|--|-----------------|---------------|--------------------|
| Peak Reverse Voltage | V_{RM} | 90 | V |
| Reverse Voltage | V_R | 80 | V |
| Average Rectified Forward Current | $I_{F(AV)}$ | 100 | mA |
| Peak Forward Current | I_{FM} | 225 | mA |
| Surge Forward Current (1 s) | I_{FSM} | 500 | mA |
| Power Dissipation | P_{tot} | 200 | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 625 | $^\circ\text{C/W}$ |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 55 to + 150 | $^\circ\text{C}$ |

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

| Parameter | Symbol | Max. | Unit |
|---|----------|------|---------------|
| Forward Voltage at $I_F = 100 \text{ mA}$ | V_F | 1.2 | V |
| Reverse Current at $V_R = 80 \text{ V}$ | I_R | 0.1 | μA |
| Capacitance between Terminals at $V_R = 0.5 \text{ V}$, $f = 1 \text{ MHz}$ | C_T | 3 | pF |
| Reverse Recovery Time at $I_{rr} = 0.1 \times I_{R1}$, $I_F = 10 \text{ mA}$, $R_L = 100 \Omega$, $V_R = 6 \text{ V}$ | t_{rr} | 4 | ns |



Electrical Characteristics Curves

Fig 1. Power Dissipation vs. Temperature

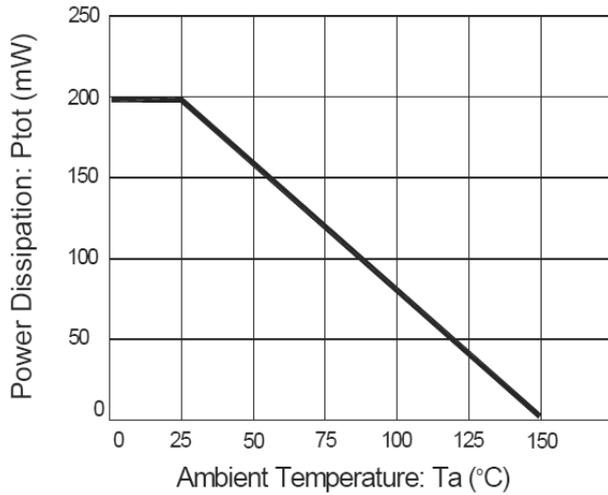


Fig 2. Total Capacitance vs. Reverse Voltage

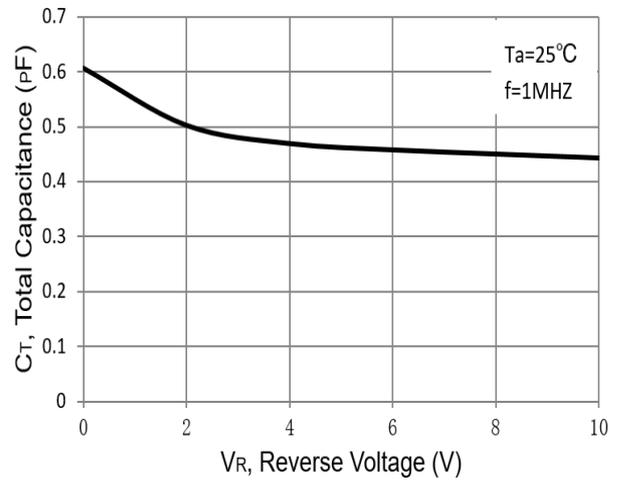


Fig 3. Reverse Current vs. Reverse Voltage

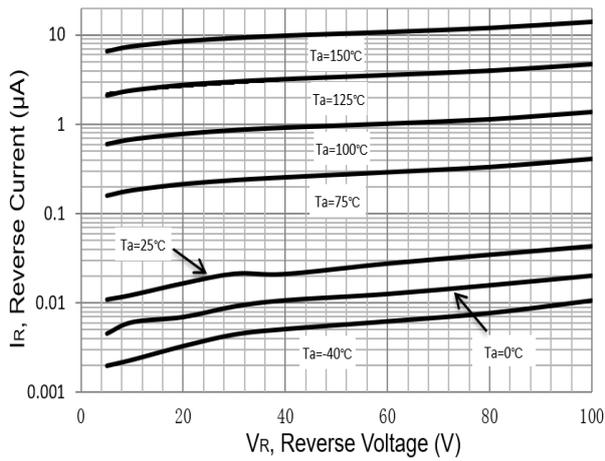
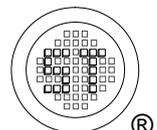
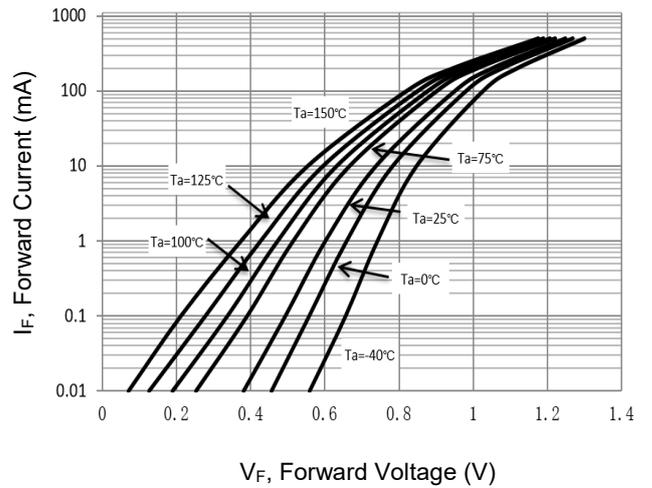


Fig 4. Forward Characteristics

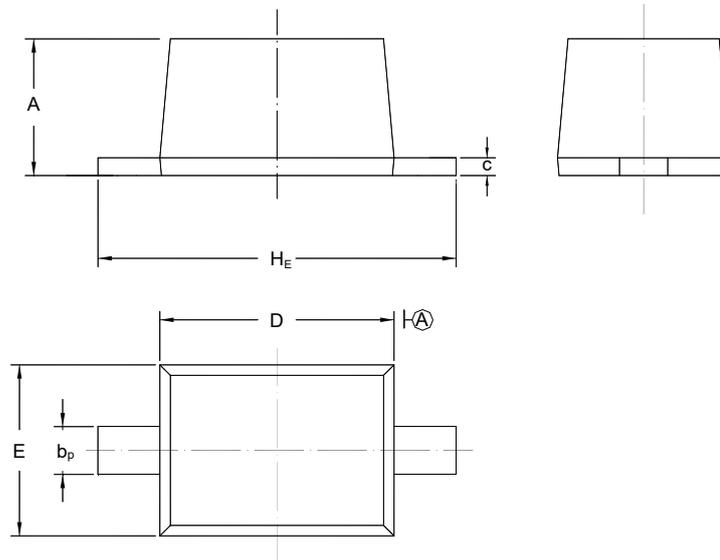


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PACKAGE OUTLINE

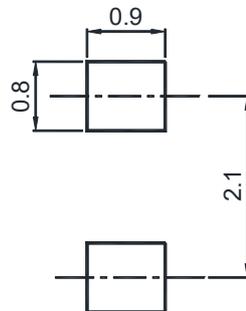
Plastic surface mounted package; 2 leads

SC-76



| UNIT | A | b _p | C | D | E | H _E |
|------|--------------|----------------|--------------|--------------|--------------|----------------|
| mm | 1.10 0.80 | 0.40 0.25 | 0.15 0.10 | 1.80 1.60 | 1.35 1.15 | 2.80 2.30 |

Recommended Soldering Footprint



Packing information

| Package | Tape Width (mm) | Pitch | | Reel Size | | Per Reel Packing Quantity |
|---------|-----------------|---------|---------------|-----------|------|---------------------------|
| | | mm | inch | mm | inch | |
| SC-76 | 8 | 4 ± 0.1 | 0.157 ± 0.004 | 178 | 7 | 3,000 |

Marking information

" III " = Cathode line

" W2 " = Part No.

" • " = HAF (Halogen and Antimony Free)

Font type: Arial

