# Silicon Epitaxial Planar Diode

**PINNING**

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


Top View
Marking Code: A
Simplified outline SOD-323 and symbol

**FEATURES**

- Small Surface Mounting
- High Speed :t=1.2ns Typ.
- High Reliability With High Surge Current Handing Capability
- High speed switching

**MECHANICAL DATA**

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.48mg / 0.00019oz

**Maximum Ratings at 25 °C**

| Parameter | Symbols | 1SS355 | Units |
|---|---|---|---|
| Non-Repetitive Peak reverse voltage | $V_{RM}$ | 90 | V |
| DC Reverse Voltage | $V_R$ | 80 | V |
| Peak forward Current | $I_{FM}$ | 225 | mA |
| Average Rectified Output Current | $I_O$ | 100 | mA |
| Surge current (1s) | $I_{surge}$ | 500 | mA |
| Typical Thermal Resistance (1) | $R_{\theta JA}$<br>$R_{\theta JC}$ | 170<br>60 | °C/W |
| Operating and Storage Temperature Range | $T_j$, $T_{stg}$ | -55 ~ +125 | °C |

( 1 ) P.C.B. mounted with 8*8mm copper pad areas.

**ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)**

| Parameter | Symbols | 1SS355 | Units |
|---|---|---|---|
| Forward voltage $I_F$=100mA | $V_F$ | 1.2 | V |
| Reverse current $V_R$=80V | $I_R$ | 0.1 | μA |
| Capacitance between terminals $V_R$=0.5V f=1MHz | $C_T$ | 3 | pF |
| Reverse Recovery Time $I_F$=10mA,$V_R$=6V,$R_L$=100Ω | trr | 4 | ns |

Fig.1 FORWARD CHARACTERISTICS

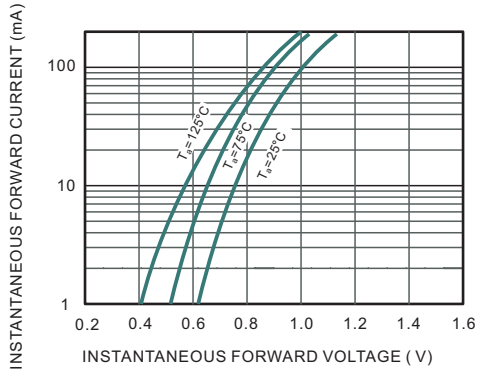



Fig.2 Typical Reverse Characteristics

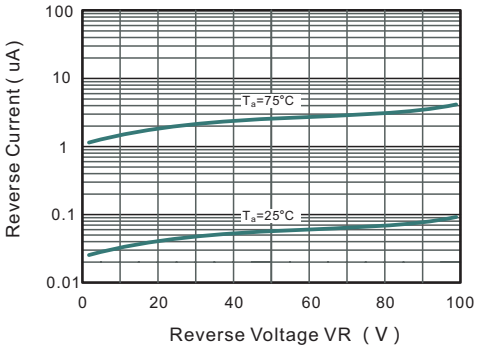
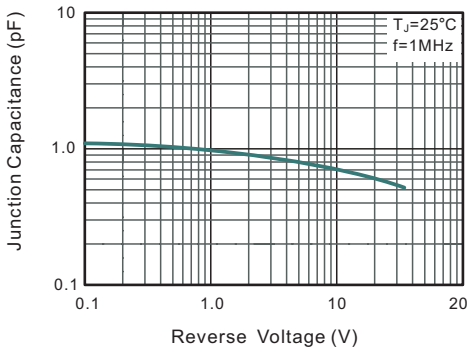


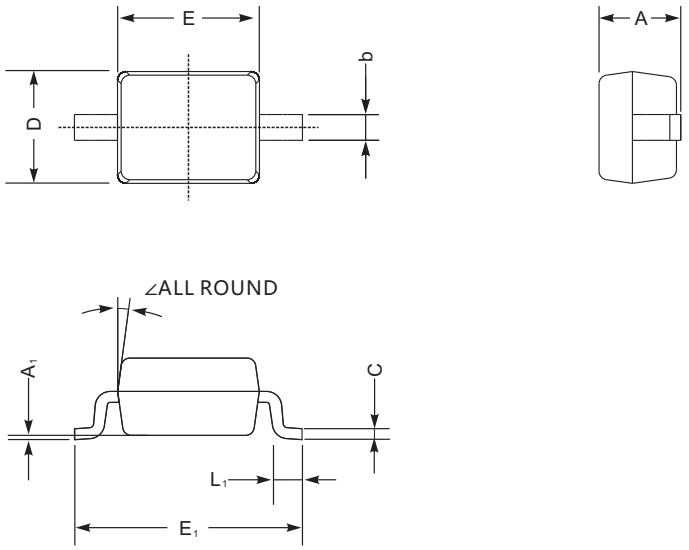

Fig.3 Typical Junction Capacitance



## PACKAGE OUTLINE

**Plastic surface mounted package; 2 leads**

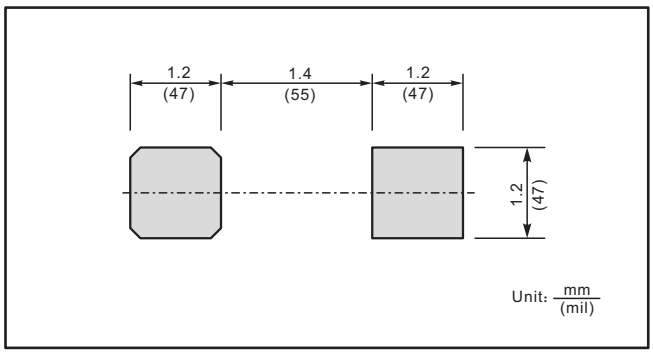
SOD-323




SOD-323 mechanical data

| UNIT | | A | C | D | E | $E_1$ | b | $L_1$ | $A_1$ | ∠ |
|---|---|---|---|---|---|---|---|---|---|---|
| mm | max | 1.1 | 0.15 | 1.4 | 1.8 | 2.75 | 0.4 | 0.45 | 0.2 | 9° |
| | min | 0.8 | 0.08 | 1.2 | 1.4 | 2.55 | 0.25 | 0.2 | — | |
| mil | max | 43 | 5.9 | 55 | 70 | 108 | 16 | 16 | 8 | |
| | min | 32 | 3.1 | 47 | 63 | 100 | 9.8 | 7.9 | — | |

### The recommended mounting pad size




### Marking

| Type number | Marking code |
|---|---|
| 1SS355 | A |