

Switching diode

• Applications

High speed switching

• Features

- 1) Extremely small surface mounting type.
- 2) High Speed.
- 3) High reliability.

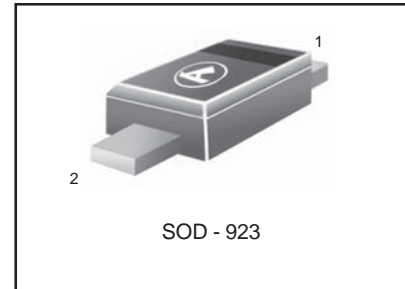
• Construction

Silicon epitaxial planar

- We declare that the material of product compliance with RoHS requirements.

- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

L1SS400CST5G
S-L1SS400CST5G



ORDRING INFORMATION

| Device | Marking | Shipping |
|--------------------------------|---------|----------------|
| L1SS400CST5G S-L1SS400CST5G | 3 | 8000/Tape&Reel |

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

| Parameter | Symbol | Limits | Unit |
|-------------------------|-------------|-------------|------|
| Peak reverse voltage | V_{RM} | 90 | V |
| DC reverse voltage | V_R | 80 | V |
| Peak forward current | I_{FM} | 225 | mA |
| Mean rectifying current | I_O | 100 | mA |
| Surge current (1s) | I_{surge} | 500 | mA |
| Junction temperature | T_J | 125 | °C |
| Storage temperature | T_{sg} | - 55 ~ +125 | °C |

Ω

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|----------|------|------|------|------|-----------------------------|
| Forward voltage | V_F | - | - | 1.2 | V | $I_F=100mA$ |
| Reverse current | I_R | - | - | 0.1 | μA | $V_R=80V$ |
| Capacitance between terminals | C_T | - | 0.72 | 3.0 | pF | $V_R=0.5V, f=1MHz$ |
| Reverse recovery time | t_{rr} | - | - | 4 | ns | $V_R=6V, I_F=10mA, R_L=100$ |

L1SS400CST5G,S-L1SS400CST5G

ELECTRICAL CHARACTERISTIC CURVES

(Ta = 25°C)

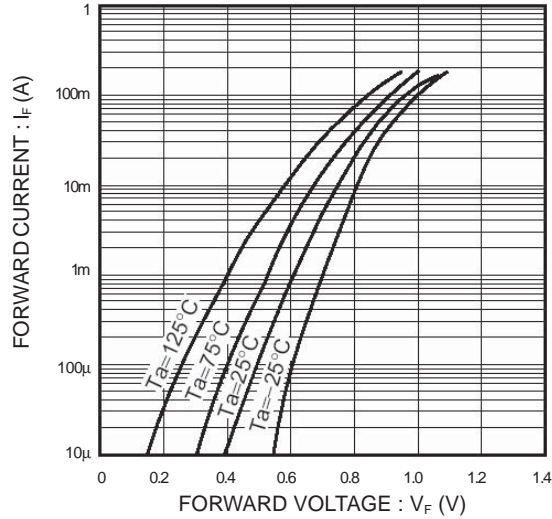


Fig.1 Forward characteristics

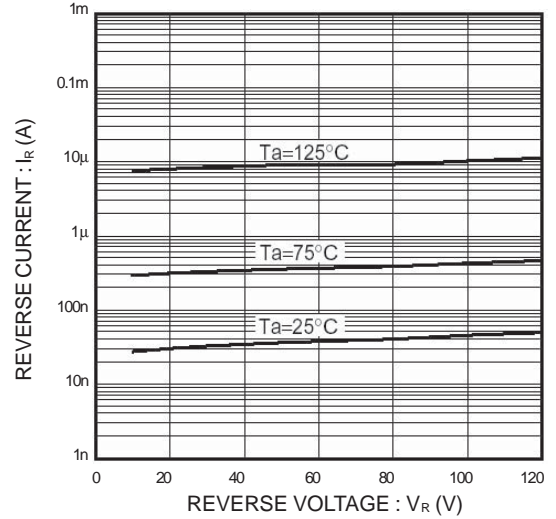


Fig.2 Reverse characteristics

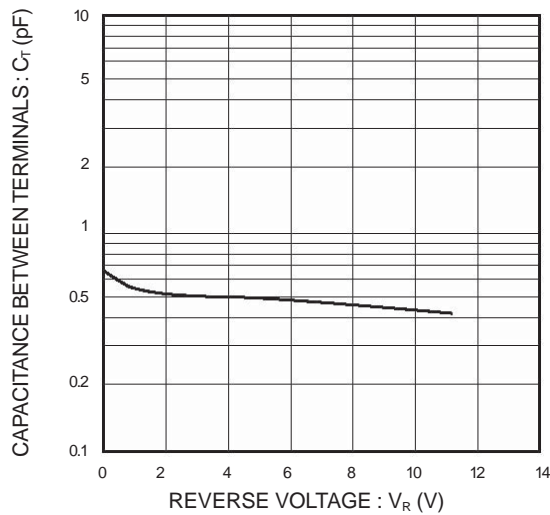


Fig.3 Capacitance between terminals

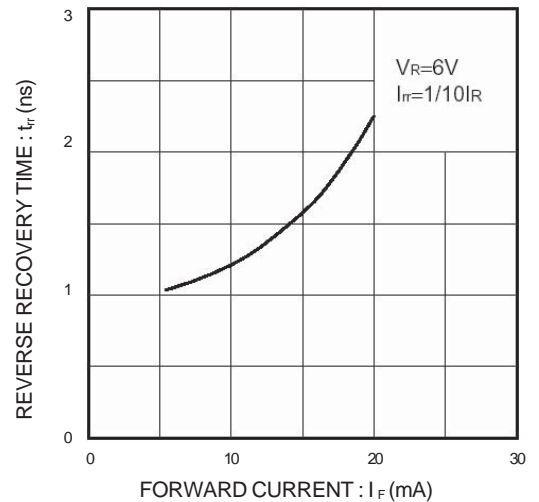


Fig.4 Reverse recovery time characteristics

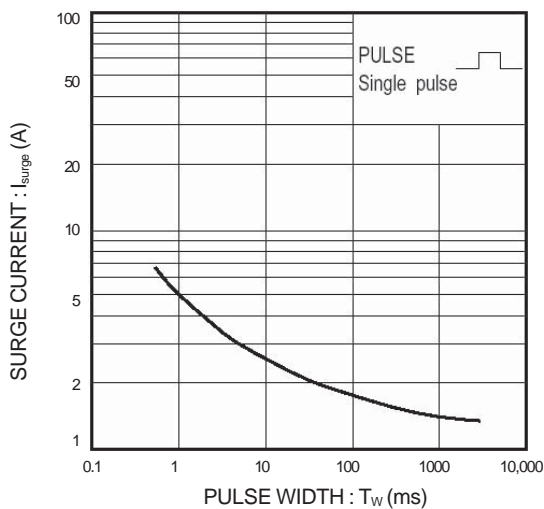


Fig.5 Surge current characteristics

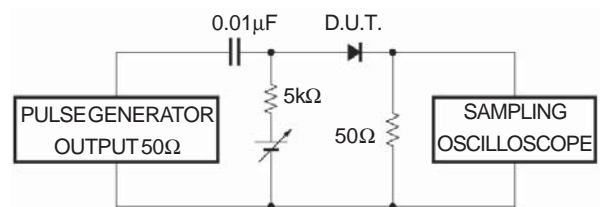
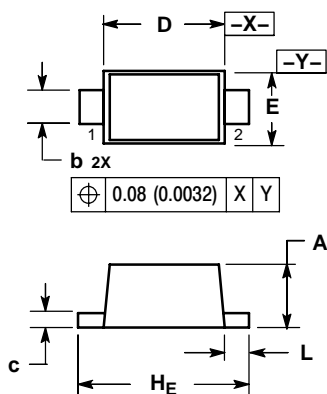


Fig.6 Reverse recovery time (t_{rr}) measurement circuit

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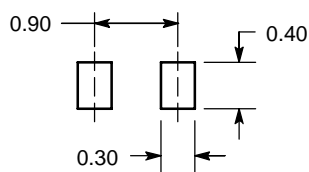
SOD-923



- NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLING DIMENSION: MILLIMETERS.
 3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.

| DIM | MILLIMETERS | | | INCHES | | |
|-----|-------------|------|------|--------|-------|-------|
| | MIN | NOM | MAX | MIN | NOM | MAX |
| A | 0.34 | 0.37 | 0.40 | 0.013 | 0.015 | 0.016 |
| b | 0.15 | 0.20 | 0.25 | 0.006 | 0.008 | 0.010 |
| c | 0.07 | 0.12 | 0.17 | 0.003 | 0.005 | 0.007 |
| D | 0.75 | 0.80 | 0.85 | 0.030 | 0.031 | 0.033 |
| E | 0.55 | 0.60 | 0.65 | 0.022 | 0.024 | 0.026 |
| HE | 0.95 | 1.00 | 1.05 | 0.037 | 0.039 | 0.041 |
| L | 0.05 | 0.10 | 0.15 | 0.002 | 0.004 | 0.006 |

SOLDERING FOOTPRINT*



DIMENSIONS: MILLIMETERS