

Switching diode

• Applications

High speed switching

• Features

- 1) Small surface mounting type.
- 2) High Speed.(trr =1.2ns Typ.)
- 3) High reliability with high surge current handling capability.
- 4) We declare that the material of product compliance with RoHS requirements.

• Construction

Silicon epitaxial planar

• Device Marking and Ordering Information

| Device | Marking | Shipping |
|------------|---------|-----------------|
| L1SS355T1G | 5D | 3000/Tape&Reel |
| L1SS355T3G | 5D | 10000/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 _{stg} | -55~+125 | °C |

• Electrical characteristics (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditons |
|-------------------------------|-----------------|------|------|------|------|--|
| 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 | - | - | 3.0 | pF | V _R =0.5V, f=1MHz |
| Reverse recovery time | t _{rr} | - | - | 4 | ns | V _R =6V, I _F =10mA, R _L =100Ω |



L1SS355T1G

• Electrical characteristic curves (Ta=25°C)

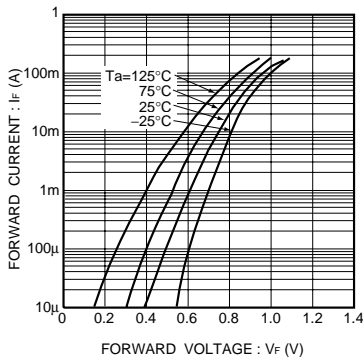


Fig.1 Forward characteristics

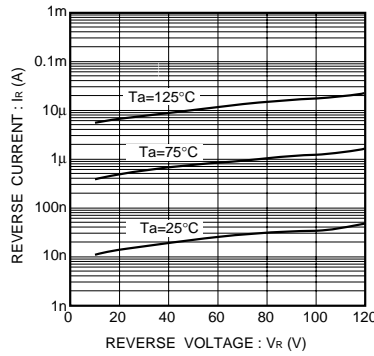


Fig.2 Reverse characteristics

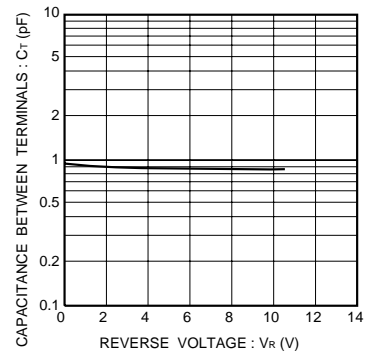


Fig.3 Capacitance between terminals characteristics

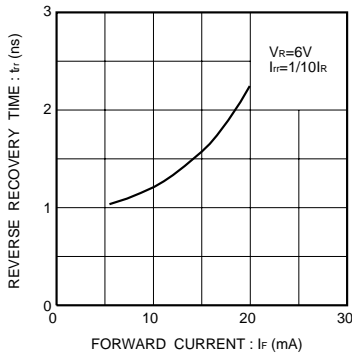


Fig.4 Reverse recovery time characteristics

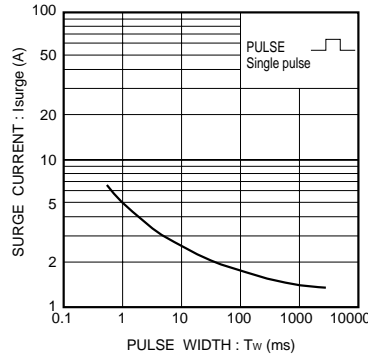


Fig.5 Surge current characteristics

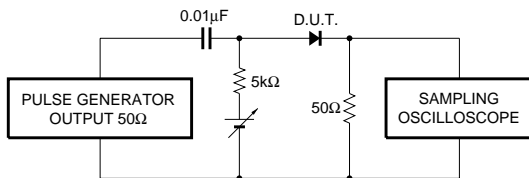
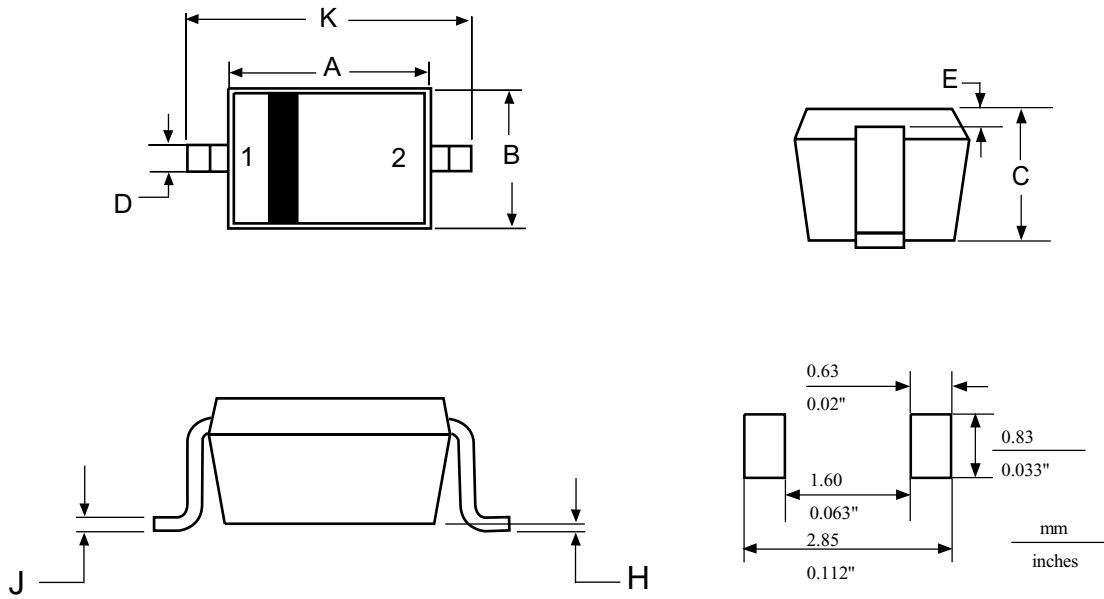


Fig.6 Reverse recovery time (t_r) measurement circuit

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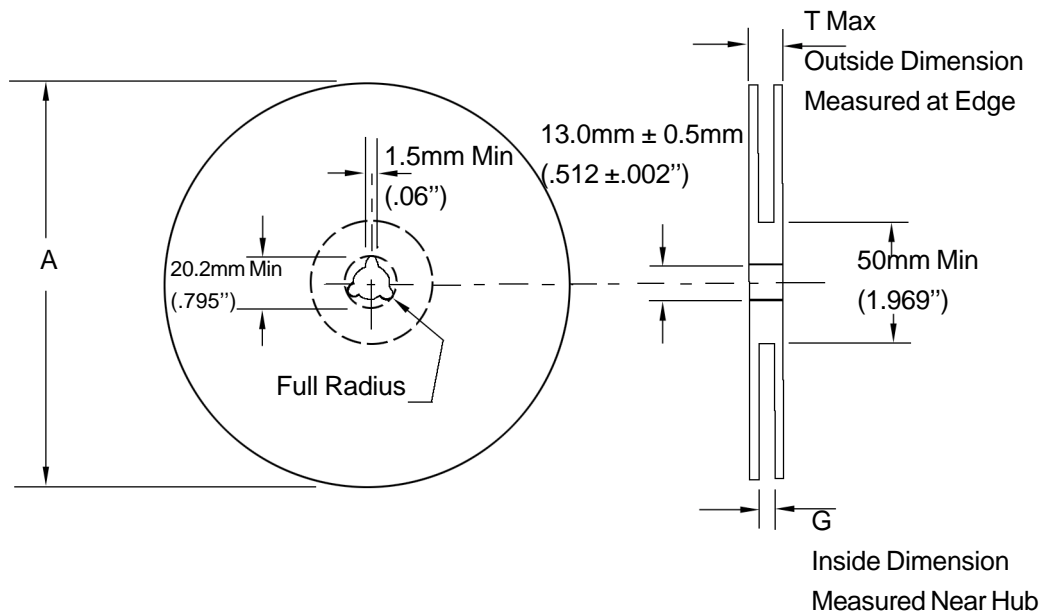
NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS

| DIM | MILLIMETERS | | INCHES | |
|-----|-------------|-------|-----------|--------|
| | MIN | MAX | MIN | MAX |
| A | 1.60 | 1.80 | 0.063 | 0.071 |
| B | 1.15 | 1.35 | 0.045 | 0.053 |
| C | 0.80 | 1.00 | 0.031 | 0.039 |
| D | 0.25 | 0.40 | 0.010 | 0.016 |
| E | 0.15 REF | | 0.006 REF | |
| H | 0.00 | 0.10 | 0.000 | 0.004 |
| J | 0.089 | 0.177 | 0.0035 | 0.0070 |
| K | 2.30 | 2.70 | 0.091 | 0.106 |

PIN:1:CATHODE
2:ANODE

EMBOSSED TAPE AND REEL DATA FOR DISCRETES



| Size | A Max | G | T Max |
|------|--------------------|--|------------------|
| 8 mm | 330mm (12.992") | 8.4mm+1.5mm, -0.0 (.33"+.059", -0.00) | 14.4mm (.56") |

Reel Dimensions

Metric Dimensions Govern — English are in parentheses for reference only

Storage Conditions

Temperature: 5 to 40 Deg.C (20 to 30 Deg. C is preferred)

Humidity: 30 to 80 RH (40 to 60 is preferred)

Recommended Period: One year after manufacturing

(This recommended period is for the soldering condition only. The characteristics and reliabilities of the products are not restricted to this limitation)

Shipment Specification

