

SURFACE MOUNT SMALL SIGNAL SCHOTTKY DIODES

VOLTAGE RANGE: 80 V CURRENT: 500mA

Features

- Small foot print, surface mountable
- Very low forward voltage drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability



• Case: SOD-80/LL34, Glass

• Terminals: Solderable per MIL-STD-202,

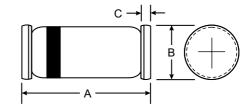
Method 208

Polarity: Cathode Band

Weight: 0.05 grams (approx.)







| LL34/ SOD-80 | | | | | | | |
|----------------------|------|------|--|--|--|--|--|
| Dim | Min | Max | | | | | |
| Α | 3.30 | 3.70 | | | | | |
| В | 1.30 | 1.60 | | | | | |
| С | 0.28 | 0.50 | | | | | |
| All Dimensions in mm | | | | | | | |

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

| Parameter | Symbol | Value | Unit |
|--|------------------|-------------|------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 80 | V |
| Forward Continuous Current* Ta = 70 °C | lF | 500 | mA |
| Repetitive Peak Forward Current* $t_p = 1s$ $\delta \le 0.5$ | I _{FRM} | 3 | А |
| Surge non Repetitive Forward Current* $t_p \le 10 ms$ | I _{FSM} | 10 | Α |
| Storage and Junction Temperature Range | T _{stg} | - 65 to 150 | °C |
| otorage and surretion remperature realige | Tj | - 65 to 125 | °C |
| Maximum Lead Temperature for Soldering during 10s at 4mm from Case | ΤL | 230 | °C |

| Symbol | Test Conditions | | Min. | Тур. | Max. | Unit | |
|--------------------|-----------------------|------------------------|------------|------|------|------|------|
| I _R * * | $T_j = 25^{\circ}C$ | V _R = 80V | | | | 200 | μΑ |
| V _F * * | $T_j = 25^{\circ}C$ | $I_F = 10mA$ | | | | 0.32 | V |
| | T _j = 25°C | I _F = 100mA | | | | 0.42 | |
| | $T_j = 25^{\circ}C$ | I _F = 1A | | | | 1 | |
| Symbol | Test Conditions | | Min. | Тур. | Max. | Unit | |
| С | $T_j = 25^{\circ}C$ | f = 1MHz | $V_R = 0V$ | | 120 | | pF |
| | | | $V_R = 5V$ | | 35 | | ן אי |



Figure 1. Forward current versus forward voltage at low level (typical values).

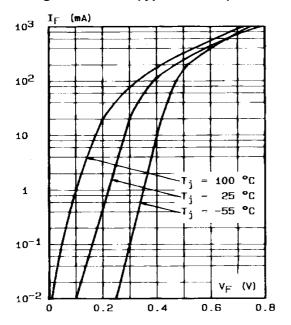


Figure 2. Forward current versus forward voltage at high level (typical values).

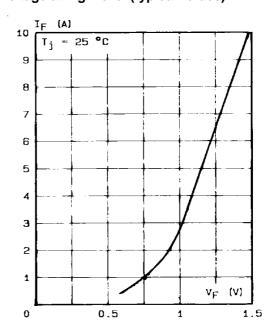


Figure 3. Reverse current versus junction temperature.

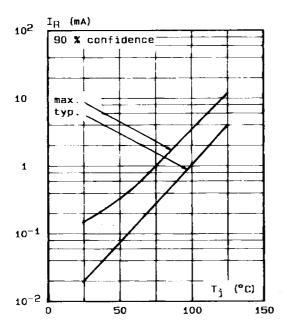


Figure 4. Reverse current versus $\ensuremath{V_{\text{RRM}}}$ in per cent.

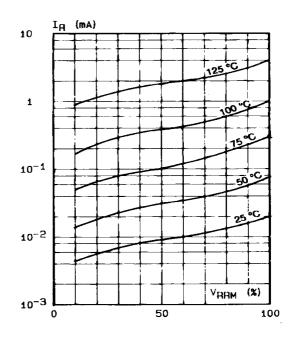




Figure 5. Capacitance C versus reverse applied voltage $V_{\mbox{\scriptsize R}}$ (typical values).

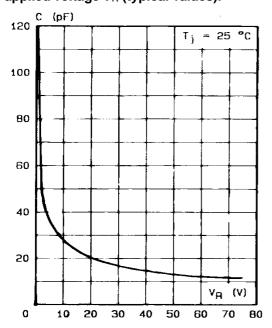


Figure 6. Surge non repetitive forward current for a rectangular pulse with $t \le 10 \text{ ms}$.

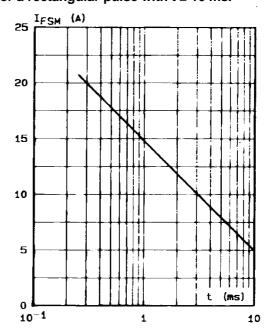


Figure 7. Surge non repetitive forward current versus number of cycles.

