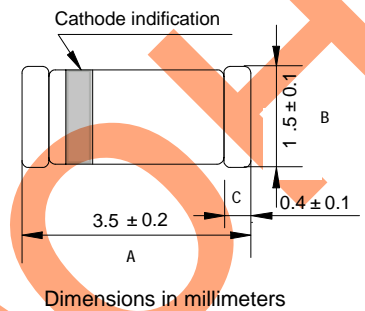


FEATURES

- Silicon epitaxial diode
- 500mW power dissipation
- High speed switching diode



LL34 (SOD-80)



MECHANICAL DATA

- Case: MINI MELF molded glass body
- Terminals: Plated axial leads, solderable per MIL-STD 750, method 2026
- Polarity: Indicated by cathode band
- Mounting Position: Any
- Weight: Approx 0.04 grams

Maximum Ratings (TA=25°C unless otherwise noted)

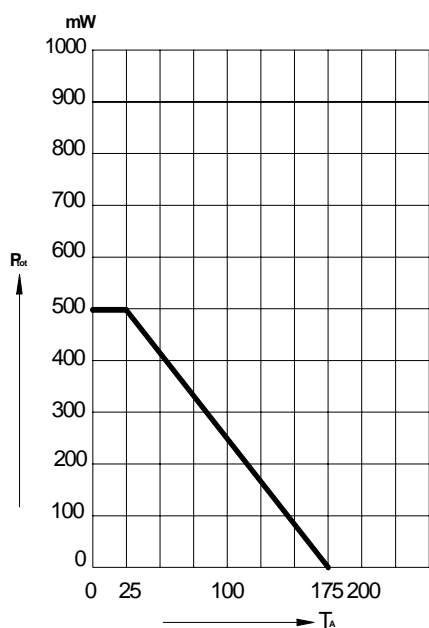
| Parameter | Symbol | Value | Unit |
|---|-----------|-------------------|------|
| Reverse voltage | V_R | 75 | v |
| Peak reverse voltage | V_{RM} | 100 | v |
| Average Rectified Current | I_O | 150 | mA |
| Non-repetitive Peak Forward Current | I_{FSM} | 500 ¹⁾ | mA |
| Power dissipation at $t_{amb}=25^\circ\text{C}$ | P_{tot} | 500 | mW |
| Junction temperature | T_J | 175 | °C |
| Storage temperature range | T_{STG} | -55-175 | °C |

1) Valid provided that electrodes are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Parameter | Symbol | Min. | Max. | Unit |
|--|-----------------|------|------|------|
| Forward voltage @ $I_F=10\text{mA}$ | V_F | | 1.0 | v |
| Leakage current at $V_R=20\text{V}$ | I_R | | 25 | nA |
| at $V_R=75\text{V}$ | I_R | | 5 | uA |
| at $V_R=20\text{V}$ $T_J=150^\circ\text{C}$ | I_R | | 50 | uA |
| Capacitance at $V_F=V_R=0\text{V}$ | C_{tot} | | 4 | pF |
| Voltage rise when switching on tested with 50mA pulses $t_p=0,1\mu\text{s}$, rise time $< .30\text{ns}$, $f_p=5$ to 100KHz | V_{fr} | | 2.5 | V |
| Reverse recovery time from $I_F=10\text{mA}$ $V_R=6\text{V}$, $R_L=100\Omega$, at $I_R=1\text{mA}$ | t_{rr} | | 4.0 | nS |
| Thermal resistance junction to ambient air | $R_{\theta JA}$ | | 350 | K/W |
| Rectification efficiency at 100MHz, $V_{RF}=2\text{V}$ | η_V | 0.45 | | |

Typical Characteristics



AMBIENT TEMPERATURE

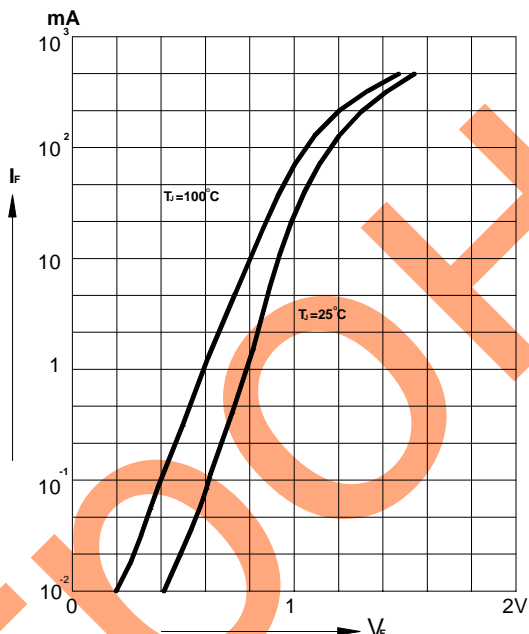


FIG.2- FORWARD CHARACTERISTICS

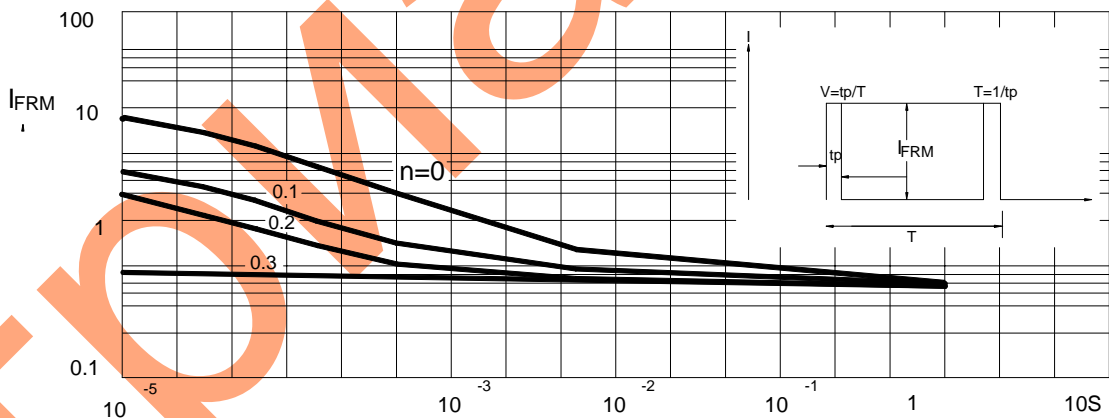


FIG.3-ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION