

**LSL34****Surface Mount Schottky Rectifier
Reverse Voltage 40V Forward Current 3A**

Features

- Schottky barrier diodes
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Low profile , typical thickness 1.0mm



eSGB (SMAF)

TYPICAL APPLICATIONS

For use in low voltage,high frequency inverters,free wheeling, and polarity protection application

| MAXIMUM RATINGS (TA = 25 °C unless otherwise noted) | | | | |
|---|-----------------------------------|---------------|--|------|
| PARAMETER | SYMBOL | LSL34 | | UNIT |
| Maximum repetitive peak reverse voltage | V _{RRM} | 40 | | V |
| Maximum RMS voltage | V _{RMS} | 28 | | V |
| Maximum DC blocking voltage | V _{DC} | 40 | | V |
| Maximum average forward rectified current at TL (See Fig.1) | I _{F(AV)} | 3.0 | | A |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | I _{FSM} | 100 | | A |
| Operating junction and storage temperature range | T _J , T _{STG} | - 55 to + 125 | | °C |

| ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted) | | | | | | |
|---|----------------------------|------------------|-----|------|------|-------|
| PARAMETER | TEST CONDITIONS | SYMBOL | MIN | TYP | MAX | UNIT |
| Instantaneous forward voltage | IF=1A, T _j =25 | VF | - | 0.35 | 0.38 | Volts |
| | IF=2A, T _j =25 | | - | 0.38 | 0.40 | |
| | IF=3A, T _j =25 | | - | 0.40 | 0.43 | |
| | IF=3A, T _j =100 | | - | 0.32 | - | |
| Maximum DC reverse current at rated DC blocking voltage | TA=25 | IR | 1 | | | mA |
| | TA=100 | | 50 | | | |
| Typical junction capacitance | 4.0 V, 1 MHz | C _J | 300 | | | pF |
| Typical thermal resistance ¹⁾ | junction to lead | R _{θJL} | 20 | | | °C/W |

Note1:Thermal resistance from junction to mount,mounted on PCB with 8.0×8.0mm copper pads

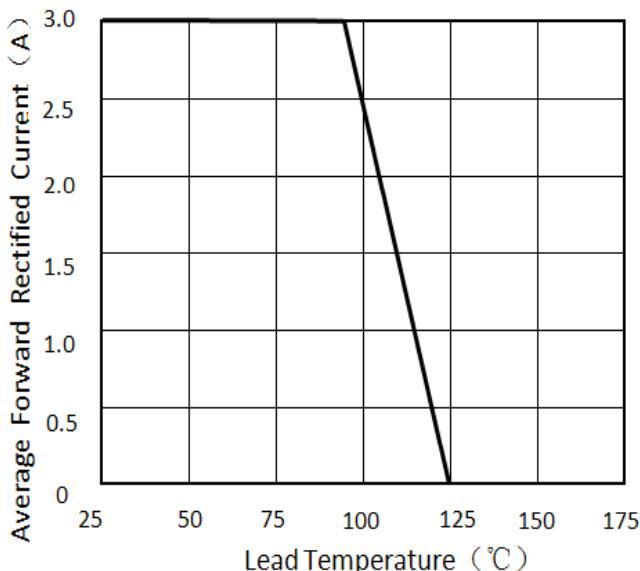
RATINGS AND CHARACTERISTICS CURVES


Figure 1. Forward Current Derating Curve

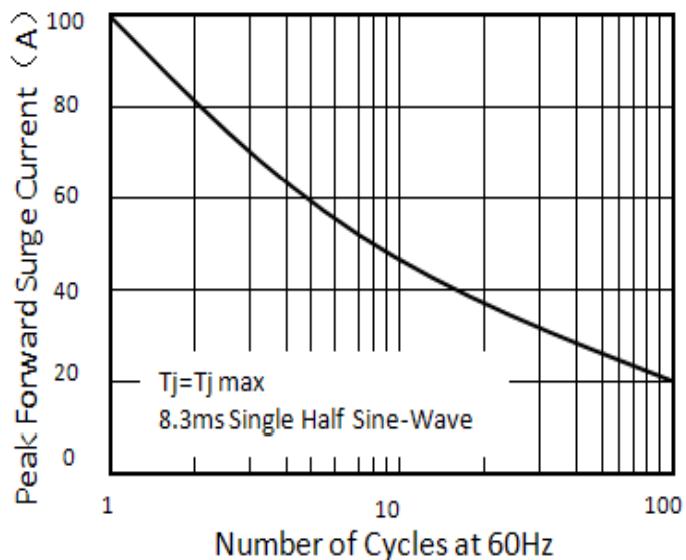


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

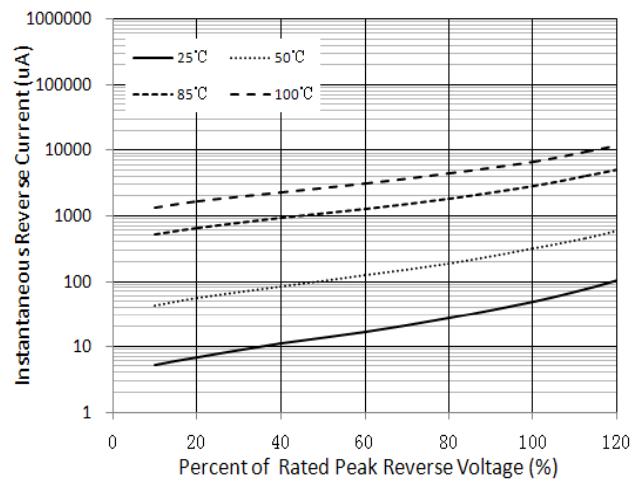


Figure 3. Typical Reverse Characteristics

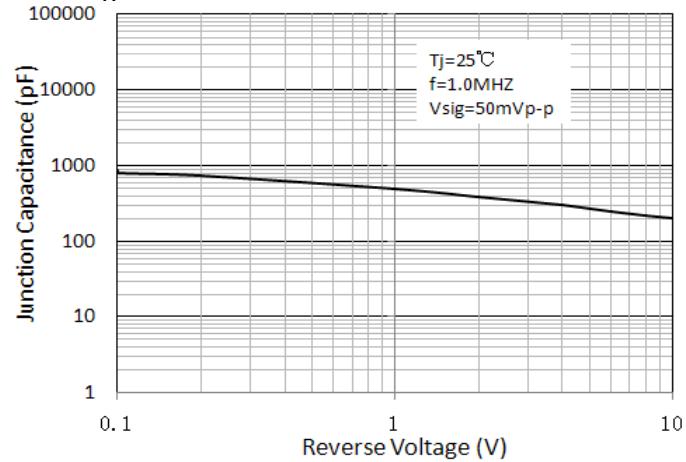


Figure 4. Typical Junction Capacitance

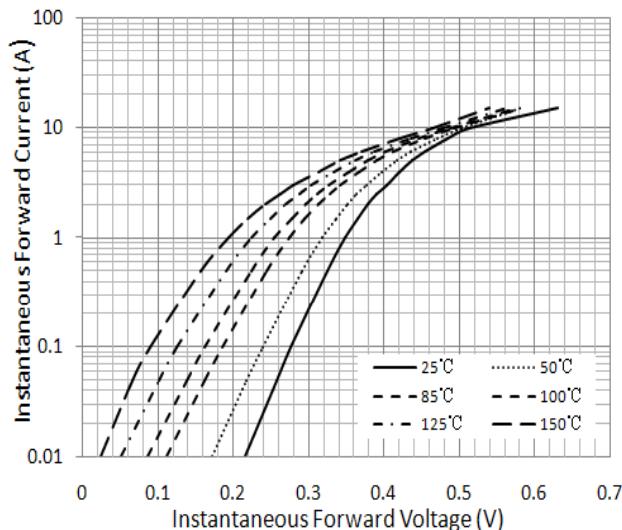
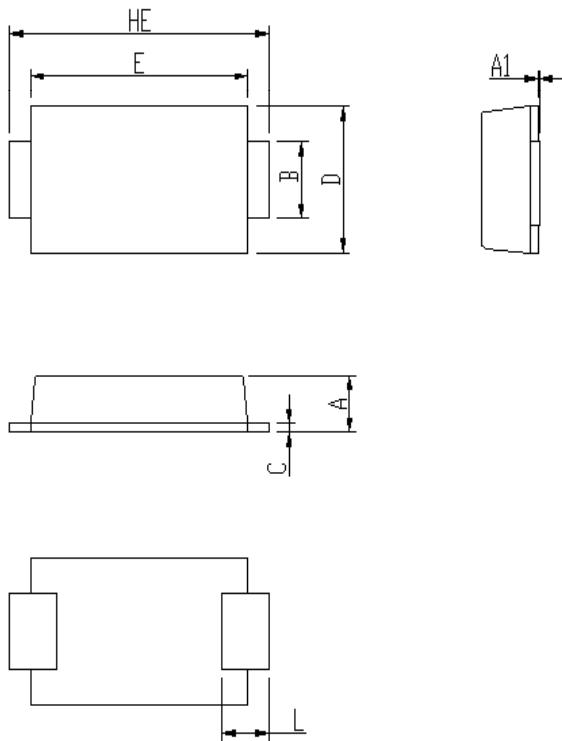
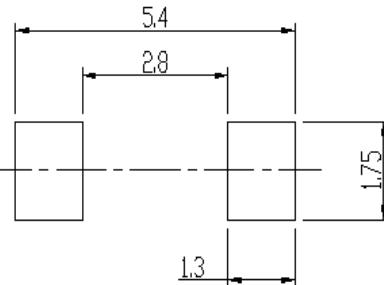


Figure 5. Typical Instantaneous Forward Characteristics

PACKAGE OUTLINE DIMENSIONS (in millimeters)


| DIM | Unit: mm | | Unit: inch | |
|-----|----------|------|------------|-------|
| | MIN | MAX | MIN | MAX |
| A | 0.92 | 1.08 | 0.036 | 0.043 |
| A1 | 0 | 0.1 | 0.000 | 0.004 |
| B | 1.25 | 1.45 | 0.049 | 0.057 |
| C | 0.1 | 0.25 | 0.004 | 0.010 |
| D | 2.6 | 2.8 | 0.102 | 0.110 |
| E | 4.1 | 4.3 | 0.161 | 0.169 |
| L | 0.7 | 1.1 | 0.028 | 0.043 |
| HE | 4.8 | 5.2 | 0.189 | 0.205 |

Soldering footprint


PACKING INFORMATION
Packing quantities:

3000 pcs/Reel , 12mm Tape, 13" Reel

Tape & Reel Specification
