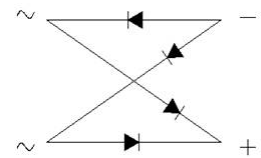


## Features

- Low VF Schottky barrier diodes
- Ideal for automated placement
- Very low profile - typical height of 1.9 mm
- High surge current capability
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds
- Polarity:As marked on body



**RoHS**  
COMPLIANT



DFL

## Mechanical Data

- Case:DFL,Molding compound meets UL 94V-0 flammability rating
- Weight:0.3435g

## Typical Applications

General purpose use in ac-to dc bridge full wave rectification for SMPS,lighting,adapter,charger,home appliances,office equipment,and telecommunication applications

| Maximum Ratings (TA = 25 °C unless otherwise noted)                                |                  |               |                  |
|--|------------------|---------------|------------------|
| Parameter  | Symbol           | DFL36S        | Unit             |
| Maximum repetitive peak reverse voltage  | VRRM             | 60            | V                |
| Maximum RMS voltage  | VRMS             | 42            | V                |
| Maximum DC blocking voltage  | VDC              | 60            | V                |
| Maximum average output rectified current   | Io(AV)           | 3.0           | A                |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | IFSM             | 100           | A                |
| Rating for fusing (t≤8.3ms)  | I <sup>2</sup> t | 40            | A <sup>2</sup> s |
| Operating junction and storage temperature range                                   | TJ, TSTG         | - 55 to + 150 | °C               |

| Electrical Characteristics (TA = 25 °C unless otherwise noted) |                 |                |        |       |
|--|-----------------|----------------|--------|-------|
| Parameter  | Test Conditions | Symbol         | DFL36S | Unit  |
| Maximum instantaneous forward voltage                          | IF=1.5 A        | V <sub>F</sub> | 0.65   | Volts |
| Maximum DC reverse current at rated DC blocking voltage        | TA=25°C         | I <sub>R</sub> | 0.5    | mA    |
|  | TA=125°C        |                | 100    |       |
| Typical junction capacitance                                   | 4.0 V, 1 MHz    | C <sub>J</sub> | 245    | pF    |

| Thermal Characteristics (TA = 25 °C unless otherwise noted) |                     |                 |        |      |
|---|---------------------|-----------------|--------|------|
| Parameter   | Test Conditions     | Symbol          | DFL36S | Unit |
| Typical thermal resistance <sup>1)</sup>                    | junction to ambient | $R_{\theta JA}$ | 42     | °C/W |
|   | junction to case    | $R_{\theta JC}$ | 13     |      |

Note:1),The thermal resistance from junction to ambient and case,mounted on P.C.B with 13×13mm copper pads,2 OZ,FR4 PCB

## Ratings and Characteristics Curves

(TA = 25 °C unless otherwise noted)

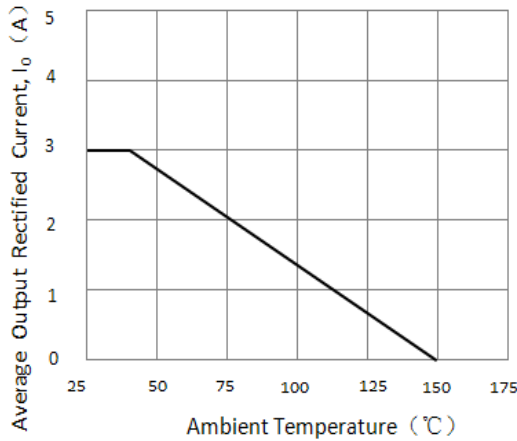


Figure 1. Forward Current Derating Curve

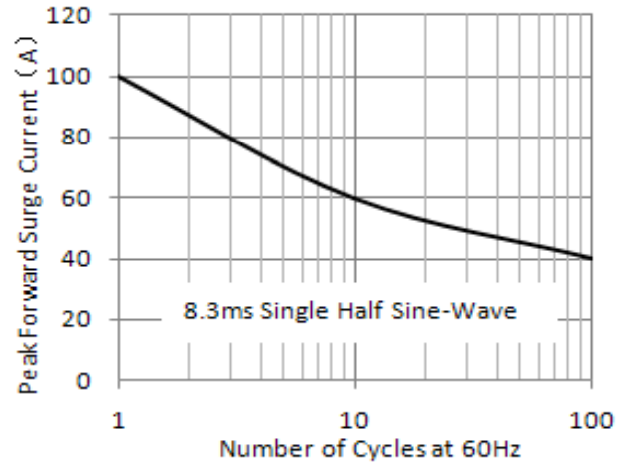


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

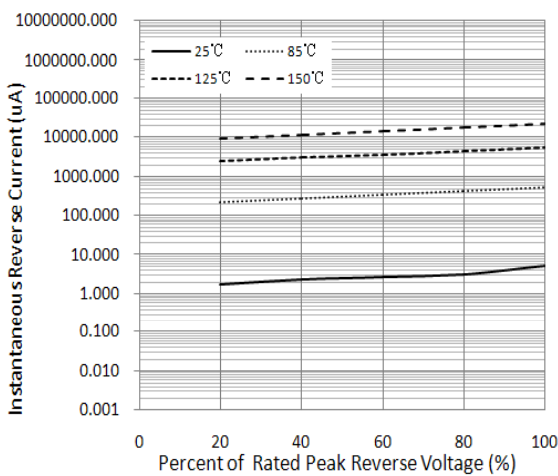


Figure 3. Typical Reverse Characteristics

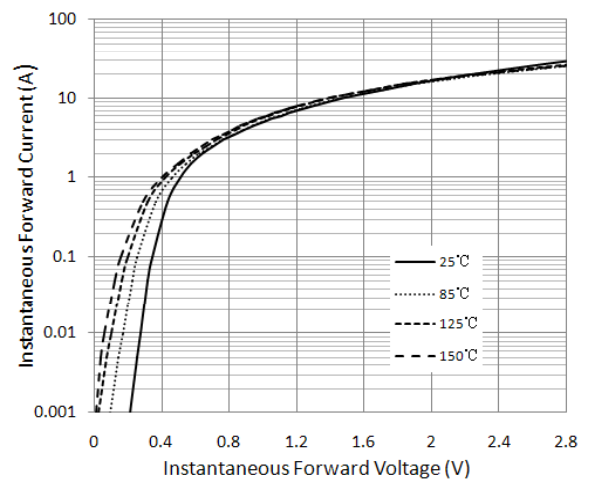
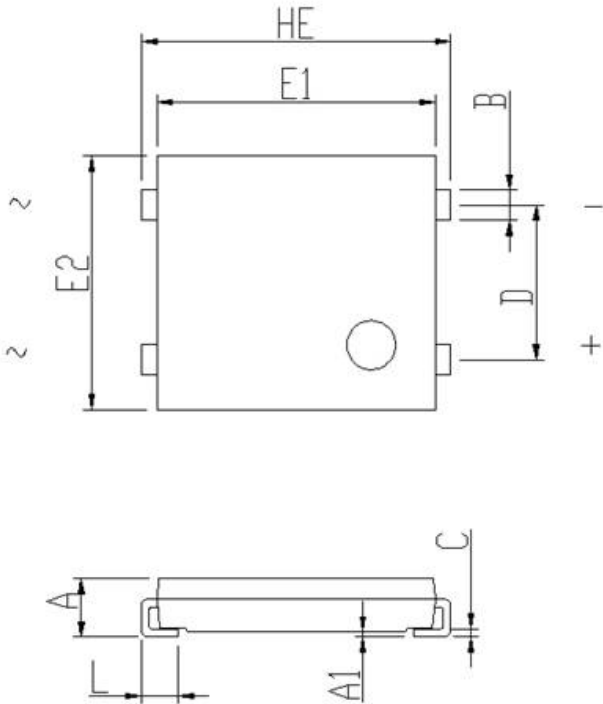


Figure 4. Typical Instantaneous Forward Characteristics

## Package Outline Dimensions

in inches (millimeters)



| Package  | DFL      |      |
|----------|----------|------|
|          | MIN      | MAX  |
| Unit: mm |          |      |
| A        | 1.7      | 2    |
| A1       | 0.05     | 0.25 |
| B        | 0.85     | 1.15 |
| C        | 0.2      | 0.35 |
| D        | 5.08 typ |      |
| E1       | 8.95     | 9.25 |
| E2       | 8.13     | 8.51 |
| L        | 1        | 1.5  |
| HE       | 9.8      | 10.3 |



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