

II. Schottky Rectifier

3.0A Surface Mount Schottky Rectifier DSS32~DSS310

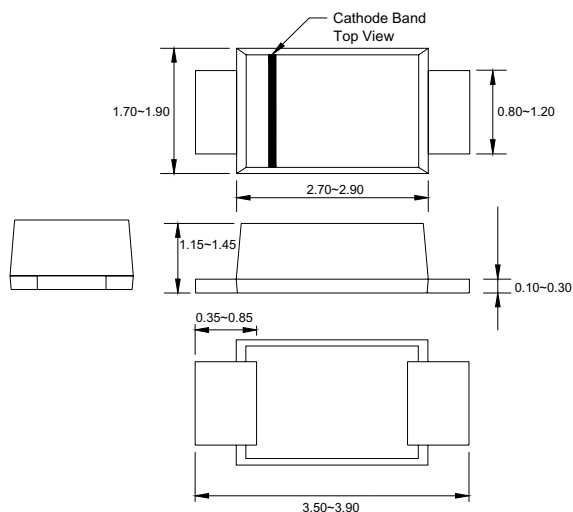
(Package: SOD-123FL)

FEATURES

- The plastic package carries Underwriters Laboratory flammability classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed : 250 /10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

- Case : JEDEC SOD-123FL molded plastic body
- Terminals : Solder plated, solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.020 grams



Case: SOD-123FL
Dimensions in inches and (millimetres)

Ratings & Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

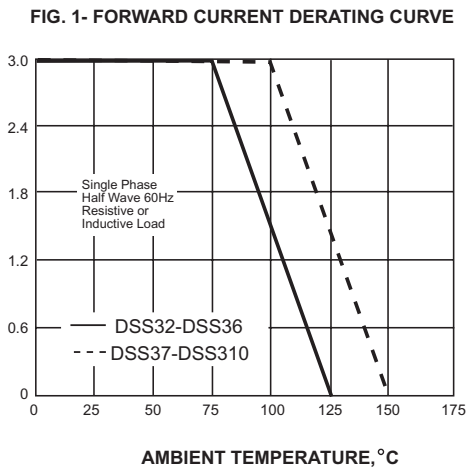
| Characteristics | Symbol | DSS 32 | DSS 33 | DSS 34 | DSS 35 | DSS 36 | DSS 37 | DSS 38 | DSS 39 | DSS 310 | Units | |
|--|-----------|--------------|--------|--------|--------|--------|-------------|--------|--------|---------|-------|------|
| | | Marking Code | D32 | D33 | D34 | D35 | D36 | D37 | D38 | D39 | | D310 |
| Maximum repetitive peak reverse voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | Volts | |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | Volts | |
| Maximum DC blocking voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | Volts | |
| Maximum average forward rectified current | I_o | 3.0 | | | | | | | | | Amps | |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 60.0 | | | | | | | | | Amps | |
| Maximum instantaneous forward voltage at 3.0 A | V_F | 0.55 | | | 0.70 | | 0.85 | | | Volts | | |
| Maximum DC reverse current at rated DC blocking voltage $T_a = 25$ $T_a = 100$ | I_R | 0.5 | | | | | | | | | mA | |
| | | 20.0 | | | 10.0 | | | | | | | |
| Typical junction capacitance (Note 1) | C_j | 500 | | | 300 | | | | | | PF | |
| Operating junction temperature range | T_j | -65 to +125 | | | | | -65 to +150 | | | | | |
| Storage temperature range | T_{stg} | -65 to +150 | | | | | | | | | | |

Notes:

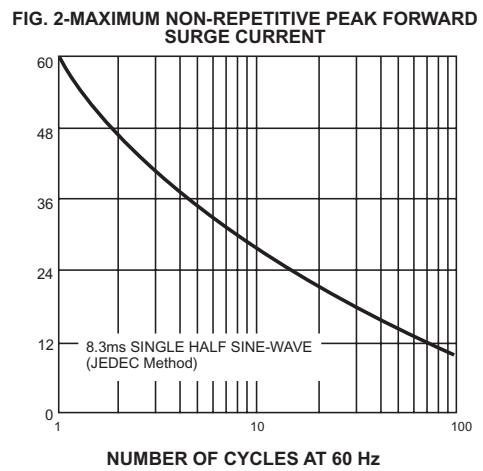
1. Measured at 1 MHz and applied reverse voltage of 4.0 volts D.C.

Ratings and Characteristic Curves of DSS32~DSS310

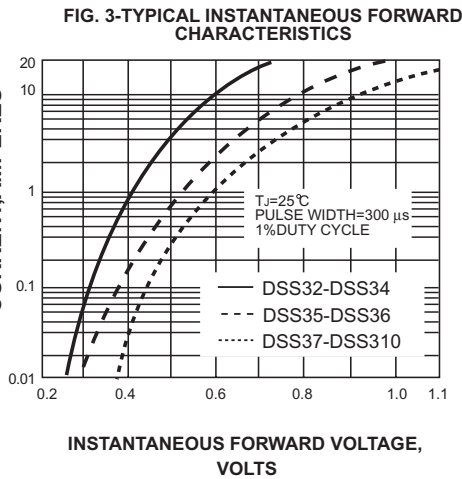
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



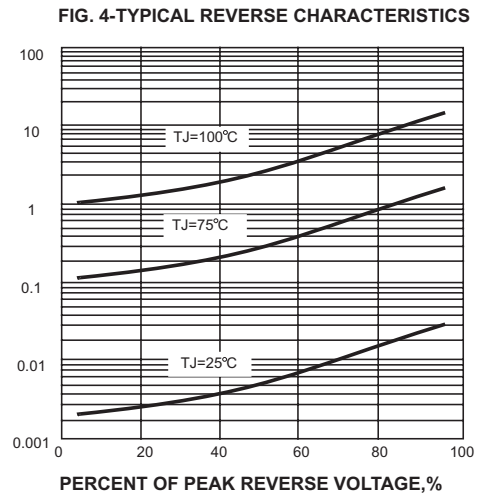
PEAK FORWARD SURGE CURRENT, AMPERES



INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF

