

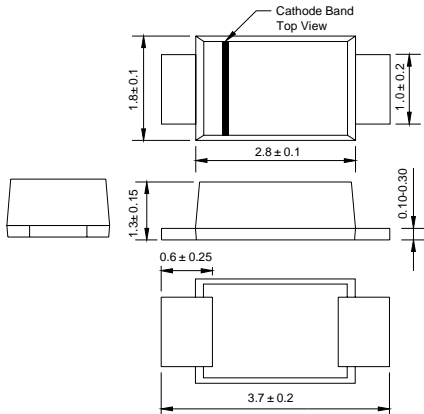


DSS32 THRU DSS310

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 3.0 Ampere

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°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC SOD-123FL molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.0007 ounce, 0.02 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

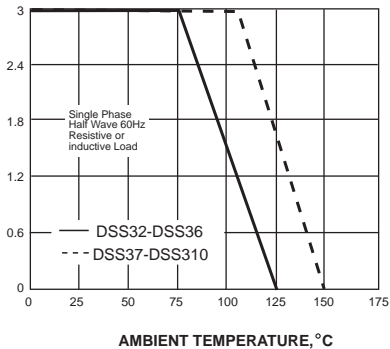
| MDD Catalog Number | SYMBOLS | DSS32 | DSS33 | DSS34 | DSS35 | DSS36 | DSS37 | DSS38 | DSS39 | DSS310 | UNITS |
|---|------------|-------------|-------|-------|-------|-------|-------|-------------|-------|--------|-------|
| | | D32 | D33 | D34 | D35 | D36 | D37 | D38 | D39 | D310 | |
| Maximum repetitive 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 | $I_{(AV)}$ | 3.0 | | | | | | | | | Amp |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 80.0 | | | | | | | | | Amps |
| Maximum instantaneous forward voltage at 3.0A | V_F | 0.52 | 0.55 | 0.70 | | | 0.85 | | | Volts | |
| Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$ | I_R | 0.5 | | | | | | 10.0 | | | mA |
| Operating junction temperature range | T_J | -50 to +125 | | | | | | -50 to +150 | | | °C |
| Storage temperature range | T_{STG} | -50 to +150 | | | | | | | | | °C |

MDD ELECTRONIC

RATINGS AND CHARACTERISTIC CURVES DSS32 THRU DSS310

AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

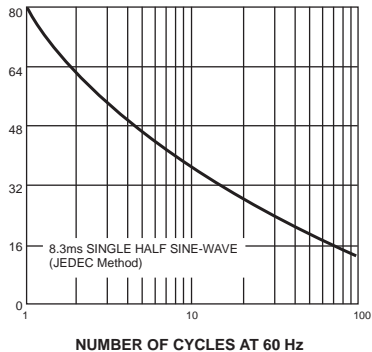


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

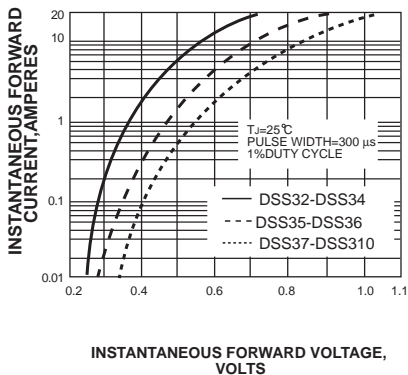


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

