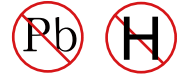




Surface Mount Schottky Barrier Diode
Voltage 20 - 250 Volts Current - 3 Amperes



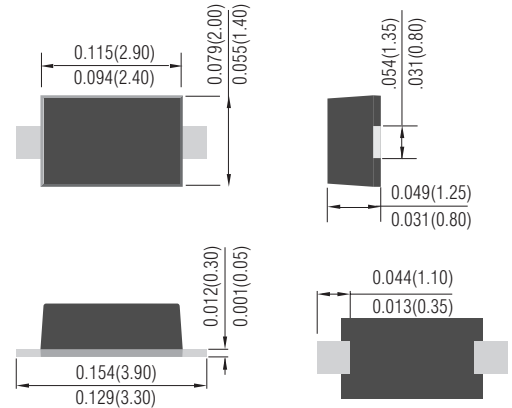
Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

- Case: SOD-123S, molded plastic
- Terminals: plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

SOD-123S Unit: inch(mm)



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
 Single Phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

| TYPE NUMBER | SYMBOL | S32S | S33S | S34S | S35S | S36S | S38S | S310S | S315S | S320S | S325S | UNITS |
|---|-----------------------------------|-----------|------|------|------|------|------|-------|-------|-------|-------|------------------|
| | Code | D32 | D33 | D34 | D35 | D36 | D38 | D310 | D315 | D320 | D325 | |
| Peak Repetitive Reverse Voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | 250 | V |
| Working Peak Reverse Voltage | V _{RWM} | | | | | | | | | | | |
| DC Blocking Voltage | V _{DC} | | | | | | | | | | | |
| RMS Reverse Voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | 175 | V |
| Average Rectified Output Current @T _L =90°C | I _{F(AV)} | 3.0 | | | | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 80 | | | | | | | | | | A |
| I ² t Rating for Fusing (t < 8.3ms) | I ² t | 26.560 | | | | | | | | | | A ² s |
| Forward Voltage per element @I _F =3.0A | V _{FM} | 0.55 | | 0.7 | | 0.85 | | 0.92 | | 0.95 | | V |
| Peak Reverse Current @T _A =25°C At Rated DC Blocking Voltage @T _A =100 °C | I _R | 0.1 | | | | | 0.05 | | | | | mA |
| | | 10 | | | | | 5 | | | | | |
| Typical Junction Capacitance (Note 1) | C _J | 110 | | | | | 70 | | | | | pF |
| Typical thermal resistance (Note 2) | R _{θJA} | 75 | | | | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55to+150 | | | | | | | | | | °C |

Note:1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C.
 2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

DEVICE CHARACTERISTICS

S32S THRU S325S

FIG. 1- FORWARD CURRENT DERATING CURVE

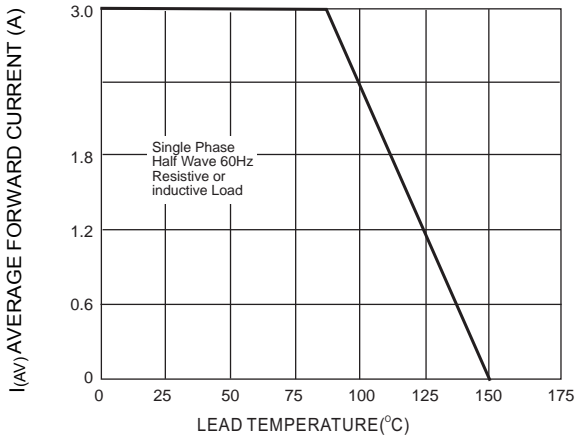


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

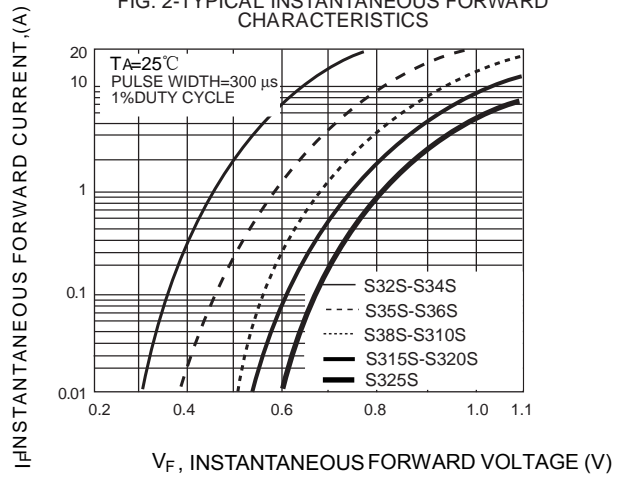


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

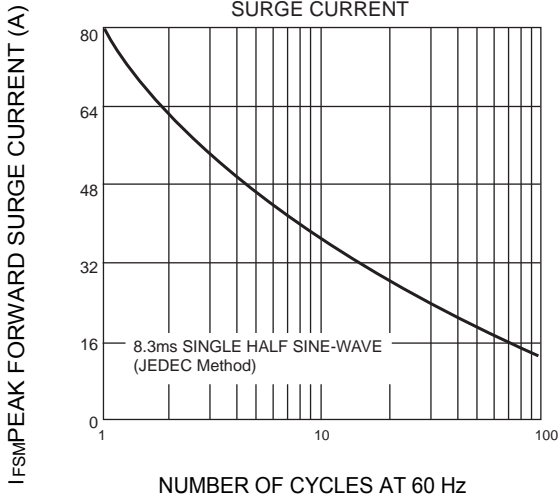


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

