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# SS32 THRU SS320

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**Reverse Voltage -** *20 to 200 Volts* **Forward Current -** *3.0 Amperes*

### FEATURES

- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆For surface mounted applications
- ◆Metal silicon junction,majority carrier conduction
- ◆Low power loss,high efficiency
- ◆Built-in strain relief,ideal for automated placement
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed: 250℃/10 seconds at terminals

### MECHANICAL DATA

**Case**: JEDEC DO-214AC molded plastic body

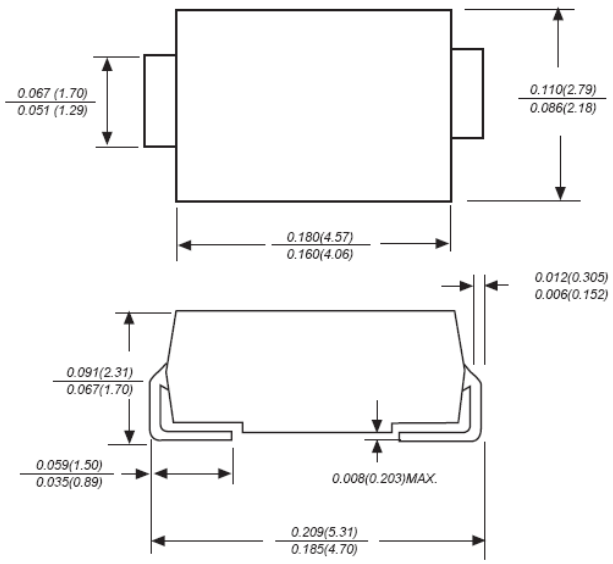
**Terminals**: leads solderable per MIL-STD-750,Method 2026

**Polarity**: Color band denotes cathode end

**Mounting Position**: Any

**Weight**: 0.058 grams

### DO-214AC




**Dimensions in inches and (millimeters)**

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

| | *SYMBOLS* | SS32 | SS33 | SS34 | SS35 | SS36 | SS38 | SS310 | SS315 | SS320 | UNITS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum repetitive peak reverse voltage | $V_{RRM}$ | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | VOLTS |
| Maximum RMS voltage | $V_{RMS}$ | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | VOLTS |
| Maximum DC blocking voltage | $V_{DC}$ | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | VOLTS |
| Maximum average forward rectified current at $T_L$(see fig.1) | $I_{(AV)}$ | 3.0 | | | | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$ | 70.0 | | | | | | | | | Amps |
| Maximum instantaneous forward voltage at 3.0A | $V_F$ | 0.55 | | | 0.70 | | 0.85 | | 0.95 | | Volts |
| Maximum DC reverse current $T_A$=25℃ | $I_R$ | 0.5 | | | | | | | 1.0 | | mA |
| at rated DC blocking voltage $T_A$=100℃ | | 20 | | | 10 | | | | | | |
| Typical junction capacitance (NOTE 1) | $C_J$ | 500 | | | 300 | | | | | | pF |
| Typical thermal resistance (NOTE 2) | $R_{QJA}$ | 55.0 | | | | | | | 62.0 | | ℃/W |
| Operating junction temperature range | $T_J$ | -65 to +125 | | | -65 to +150 | | | | | | ℃ |
| Storage temperature range | $T_{STG}$ | -65 to +150 | | | | | | | | | ℃ |

**Note :**1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.P.C.B. mounted with 0.2x0.2″(5.0x5.0mm) copper pad areas

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## RATINGS AND CHARACTERISTIC CURVES SS32 THRU SS320

FIG. 1- FORWARD CURRENT DERATING CURVE

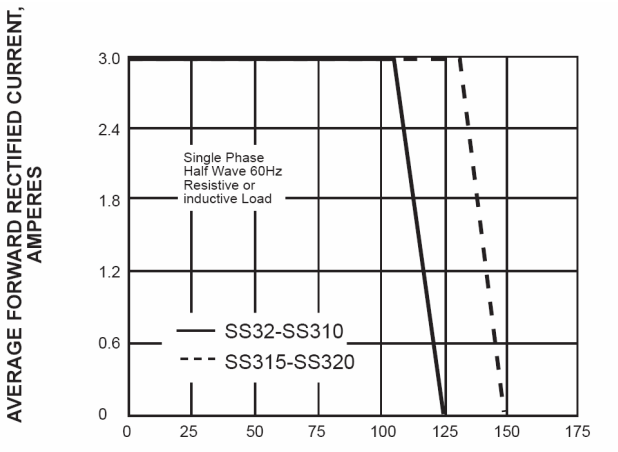



FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

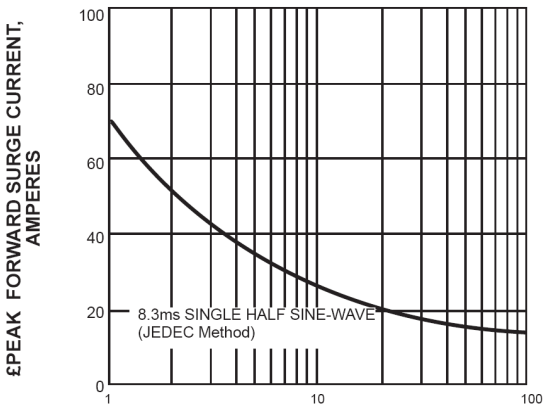



FIG. 3-TYPICAL INSTANTANEOUS FORWARDCHARACTERISTICS

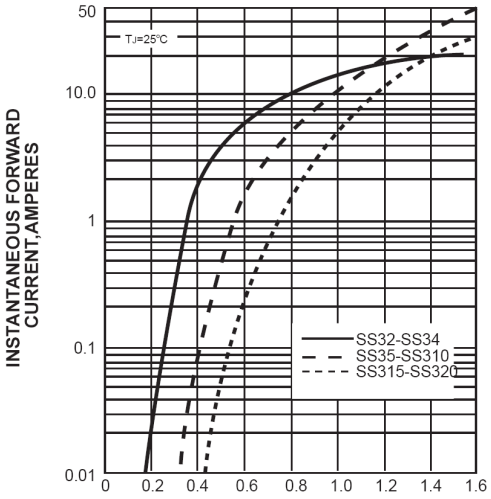



FIG. 4-TYPICAL REVERSE CHARACTERISTICS

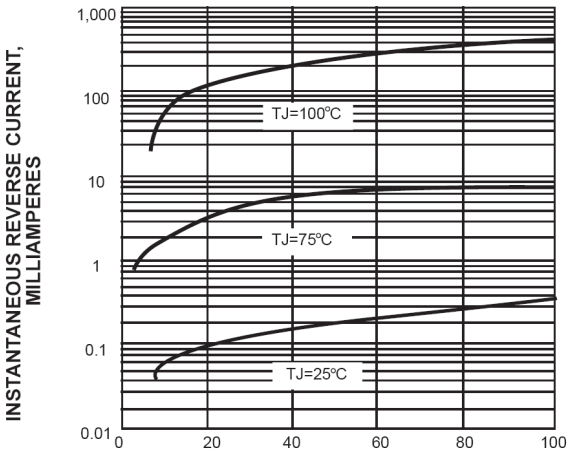



FIG. 5-TYPICAL JUNCTION CAPACITANCE

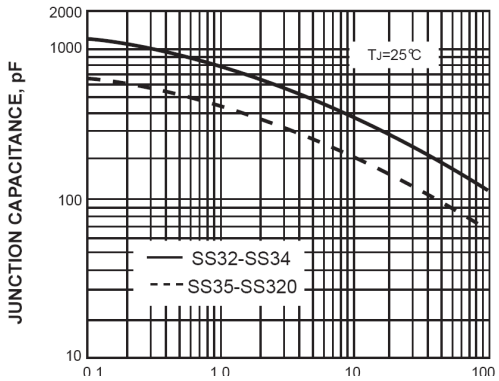
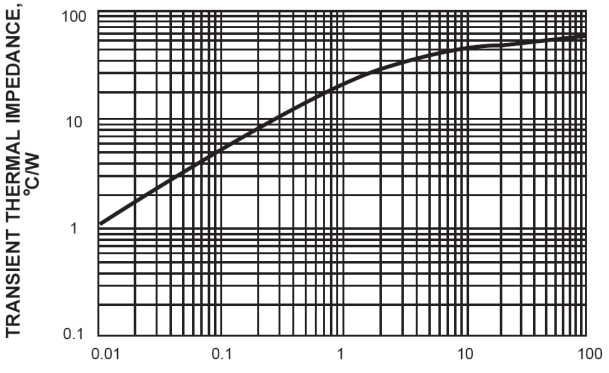



FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE




Note: Specifications are subject to change without notice.