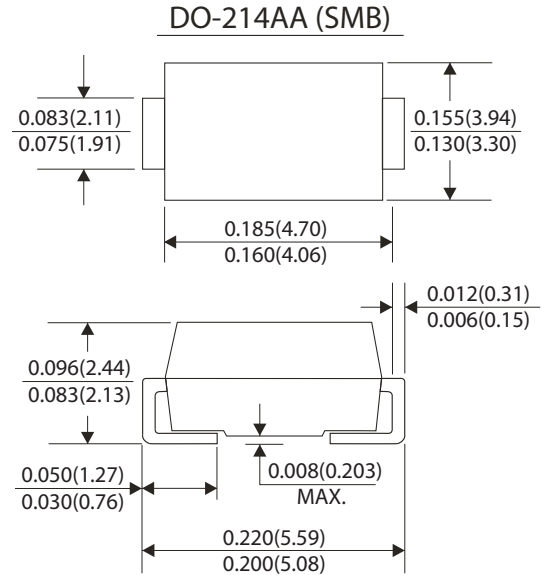


Features

- For surface mounted applications in order optimize board space
- Low profile package
- Built-in strain relief, ideal for automated placement
- Fast switching speed
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- Glass passivated chip junction
- High temperature soldering : 250 °C /10 seconds at terminals

Mechanical Data

- Case : JEDEC SMB(DO-214AA) molded plastic body
- Terminals : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.003 ounce, 0.093 gram



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, derate by 20%)

| | Symbols | RS2A | RS2B | RS2D | RS2G | RS2J | RS2K | Units |
|--|-------------------------|-------------|------|------|------|------|------|---------------------------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | Volts |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | Volts |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | Volts |
| Maximum average forward rectified current at $T_L=100^\circ\text{C}$ | $I_{(AV)}$ | 1.5 | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 50.0 | | | | | | Amps |
| Maximum instantaneous forward voltage at 1.5A | V_F | 1.30 | | | | | | Volts |
| Maximum reverse current at rated voltage | $T_A=25^\circ\text{C}$ | 5.0 | | | | | | μA |
| | $T_A=125^\circ\text{C}$ | 200 | | | | | | |
| Maximum reverse recovery time (Note 1) | T_{rr} | 150 | | | | 250 | 500 | nS |
| Typical thermal resistance (Note 3) | $R_{\theta JL}$ | 18.0 | | | | | | $^\circ\text{C}/\text{W}$ |
| | $R_{\theta JA}$ | 55.0 | | | | | | |
| Typical junction capacitance (Note 2) | C_J | 50.0 | | | | | | pF |
| Operating junction and storage temperature range | T_J T_{STG} | -55 to +150 | | | | | | $^\circ\text{C}$ |

Notes:

- (1) Test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$.
- (2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.
- (3) Thermal resistance from junction to ambient and junction to lead mounted on PCB mounted on $0.27 \times 0.27'' (7.0 \times 7.0\text{mm})$ copper pad areas



RATINGS AND CHARACTERISTIC CURVES RS2A THRU RS2K

FIG.1-FORWARD CURRENT DERATING CURVE

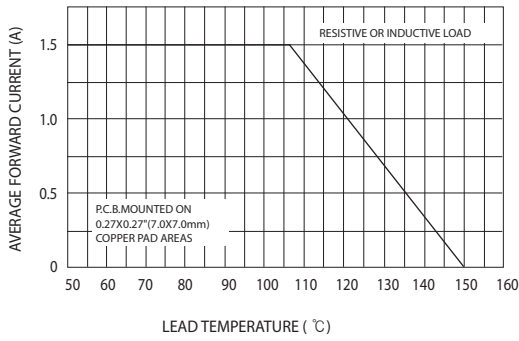


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

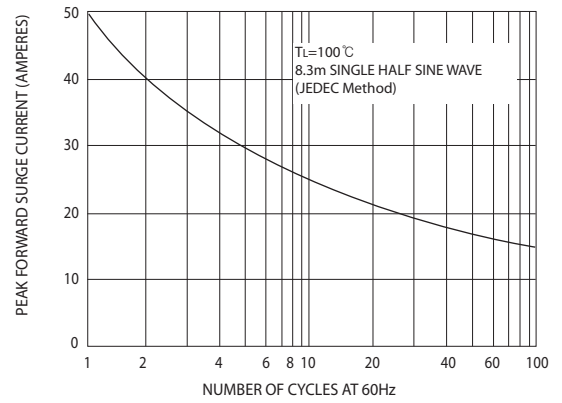


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

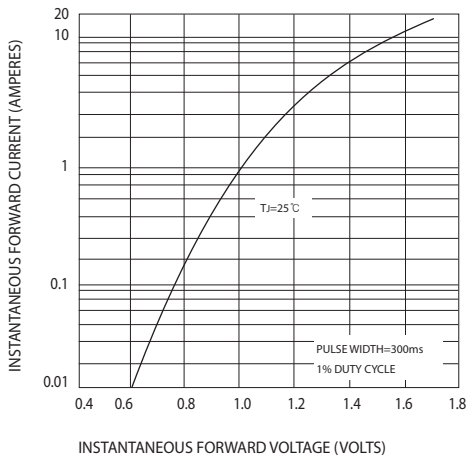


FIG.4-TYPICAL JUNCTION CAPACITANCE

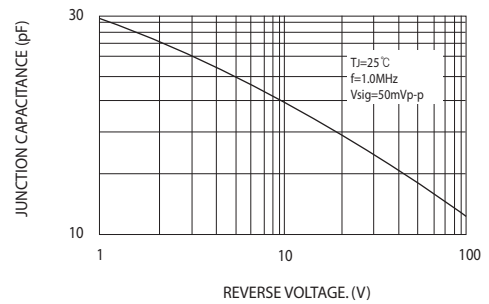


FIG.5-TYPICAL REVERSE CHARACTERISTICS

