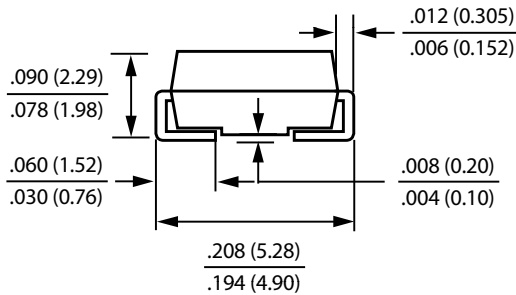
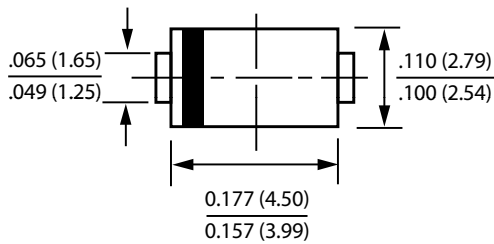




S2AA thru S2WA



General Purpose Rectifiers Glass Passivation Junction



DO-214AC(SMA)

Dimensions in inches and (millimeters)



| Ordering Information | |
|----------------------|--------------|
| Part Number | Remark |
| S2xA | General |
| S2xA-H | Halogen Free |
| S2xA-Q | Automotive |

| PRIMARY CHARACTERISTICS | |
|-------------------------|-----------------|
| I_F | 2A |
| V_{RRM} | 50~2000V |
| I_{FSM} | 60A |
| V_F | 1.1, 1.2, 1.3 V |
| T_J max | 150°C |

Features

- High current capability
- High surge current capability
- Low reverse current
- Component in accordance to RoHS 2002/95/EC
- AEC-Q101 qualified

Mechanical Data

- DO-214AC(SMA)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead free Plating (Tin Finish)
Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.062 grams (approximate)

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

| PARAMETER | SYMBOL | S2 AA | S2 BA | S2 DA | S2 GA | S2 JA | S2 KA | S2 MA | S2 TA | S2 WA | S2 XA | S2 YA | UNIT |
|---|-----------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | 1300 | 1600 | 1800 | 2000 | V |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | 910 | 1120 | 1260 | 1400 | V |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | 1300 | 1600 | 1800 | 2000 | V |
| Maximum average forward rectified current | I_F | 2.0 | | | | | | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 60.0 | | | | | | | | | | | A |
| Maximum Instantaneous Forward Voltage $I_F=2A @ 25^\circ C$ | V_F | 1.1 | | | | | | | | 1.2 | 1.3 | V | |
| Maximum DC Reverse Current @ $T_c=25^\circ C$ at Rated DC Blocking Voltage @ $T_c=100^\circ C$ | I_R | 5 | | | | | | | | 100 | | uA | |
| Typical Junction Capacitance(NOTE1) | C_j | 50 | | | | | | | | | | pF | |
| Typical Thermal Resistance | $R_{\theta Ja}$ | 100 | | | | | | | | | | °C/W | |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | | | | | °C |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | | | | | °C |

NOTES:

1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC
2. Device mounted on FR-4 substrate, 1"×1", 2oz, single-sided, PC boards with 0.1"×0.15" copper pad.



General Purpose Rectifiers Glass Passivation Junction

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

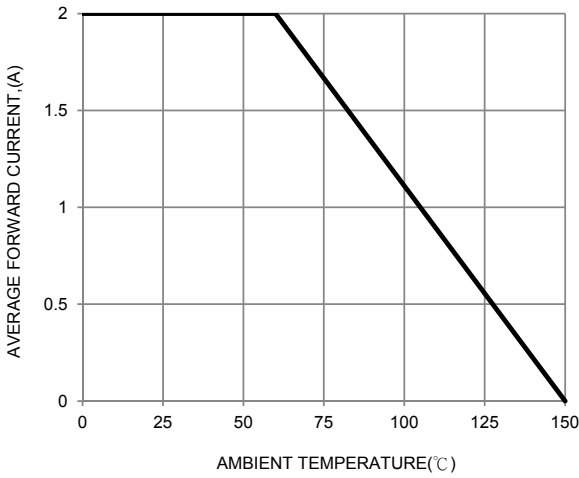


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

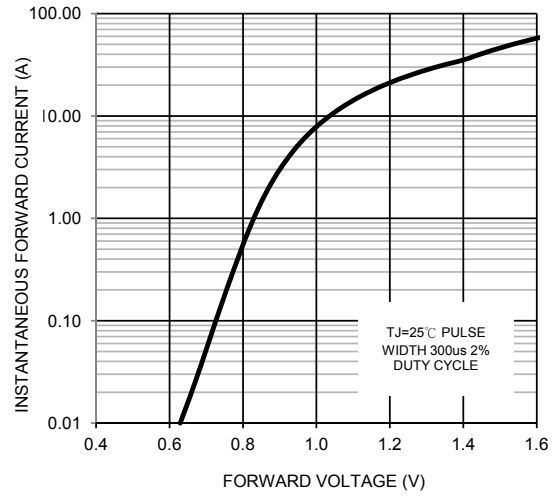


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

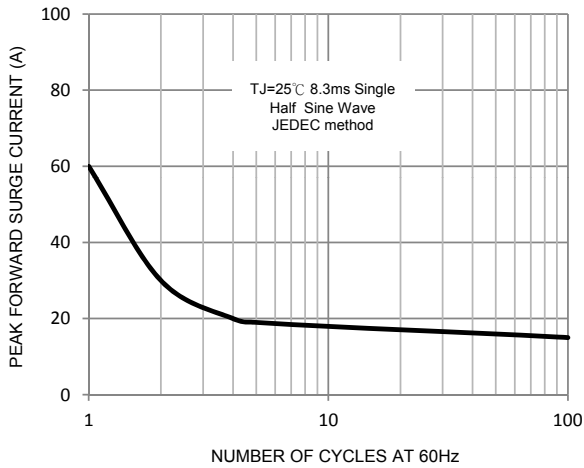


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

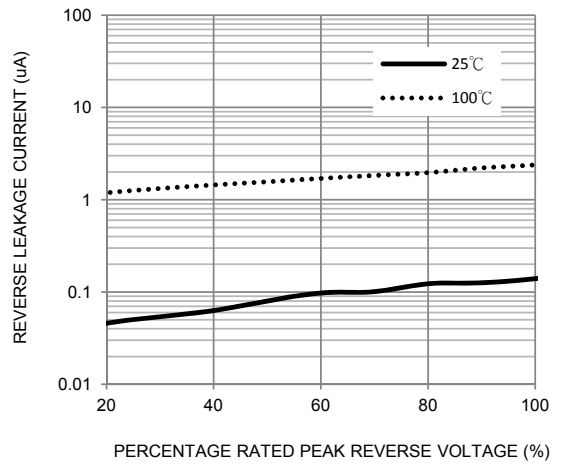


FIG. 5-TYPICAL JUNCTION CAPACITANCE

