

**Silicon Standard
Recovery Diode**
Features

- High Surge Capability
- Types up to 600 V V_{RRM}

DO-5 Package


Maximum ratings, at $T_J = 25\text{ }^\circ\text{C}$, unless otherwise specified

| Parameter | Symbol | Conditions | 1N3208 (R) | 1N3209 (R) | 1N3210 (R) | 1N3211 (R) | Unit |
|--|------------|--|------------|------------|------------|------------|------------------|
| Repetitive peak reverse voltage | V_{RRM} | | 50 | 100 | 200 | 300 | V |
| RMS reverse voltage | V_{RRMS} | | 35 | 70 | 140 | 210 | V |
| DC blocking voltage | V_{DC} | | 50 | 100 | 200 | 300 | V |
| Continuous forward current | I_F | $T_C \leq 150\text{ }^\circ\text{C}$ | 15 | 15 | 15 | 15 | A |
| Surge non-repetitive forward current, Half Sine Wave | I_{FSM} | $T_C = 25\text{ }^\circ\text{C}$, $t_p = 8.3\text{ ms}$ | 297 | 297 | 297 | 297 | A |
| Operating temperature | T_J | | -65 to 175 | -65 to 175 | -65 to 175 | -65 to 175 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | | -65 to 175 | -65 to 175 | -65 to 175 | -65 to 175 | $^\circ\text{C}$ |

Electrical characteristics, at $T_J = 25\text{ }^\circ\text{C}$, unless otherwise specified

| Parameter | Symbol | Conditions | 1N3208 (R) | 1N3209 (R) | 1N3210 (R) | 1N3211 (R) | Unit |
|-------------------------------------|-----------------|---|------------|------------|------------|------------|--------------------|
| Diode forward voltage | V_F | $I_F = 15\text{ A}$, $T_J = 25\text{ }^\circ\text{C}$ | 1.5 | 1.5 | 1.5 | 1.5 | V |
| Reverse current | I_R | $V_R = 50\text{ V}$, $T_J = 25\text{ }^\circ\text{C}$ | 10 | 10 | 10 | 10 | μA |
| | | $V_R = 50\text{ V}$, $T_J = 150\text{ }^\circ\text{C}$ | 10 | 10 | 10 | 10 | mA |
| Thermal characteristics | | | | | | | |
| Thermal resistance, junction - case | $R_{\theta JC}$ | | 0.65 | 0.65 | 0.65 | 0.65 | $^\circ\text{C/W}$ |



Figure 1-Typical Forward Characteristics

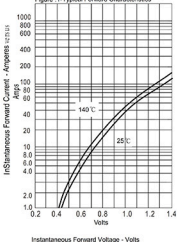


Figure 2-Forward Derating Curve

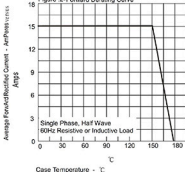


Figure 3-Peak Forward Surge Current

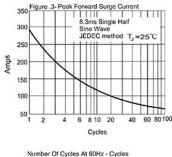


Figure 4-Typical Reverse Characteristics

