

Silicon Standard Recovery Diode

$V_{RRM} = 50\text{ V} - 600\text{ V}$

$I_F = 60\text{ A}$

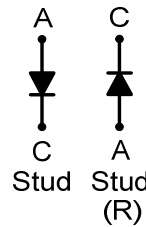
Features

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

DO-5 Package

Note:

1. Standard polarity: Stud is cathode.
2. Reverse polarity (R): Stud is anode.
3. Stud is base.



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

| Parameter | Symbol | Conditions | 1N2128A(R) | 1N2129A(R) | 1N2130A(R) | 1N2131A(R) | Unit |
|--|------------|--|------------|------------|------------|------------|------------------|
| Repetitive peak reverse voltage | V_{RRM} | | 50 | 100 | 150 | 200 | V |
| RMS reverse voltage | V_{RMS} | | 35 | 70 | 106 | 140 | V |
| DC blocking voltage | V_{DC} | | 50 | 100 | 150 | 200 | V |
| Continuous forward current | I_F | $T_C \leq 150\text{ }^\circ\text{C}$ | 60 | 60 | 60 | 60 | A |
| Surge non-repetitive forward current, Half Sine Wave | $I_{F,SM}$ | $T_C = 25\text{ }^\circ\text{C}$, $t_p = 8.3\text{ ms}$ | 1050 | 1050 | 1050 | 1050 | A |
| Operating temperature | T_j | | -65 to 200 | -65 to 200 | -65 to 200 | -65 to 200 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | | -65 to 200 | -65 to 200 | -65 to 200 | -65 to 200 | $^\circ\text{C}$ |

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

| Parameter | Symbol | Conditions | 1N2128A(R) | 1N2129A(R) | 1N2130A(R) | 1N2131A(R) | Unit |
|-----------------------|--------|---|------------|------------|------------|------------|---------------|
| Diode forward voltage | V_F | $I_F = 60\text{ A}$, $T_j = 25\text{ }^\circ\text{C}$ | 1.1 | 1.1 | 1.1 | 1.1 | V |
| Reverse current | I_R | $V_R = 50\text{ V}$, $T_j = 25\text{ }^\circ\text{C}$ | 10 | 10 | 10 | 10 | μA |
| | | $V_R = 50\text{ V}$, $T_j = 150\text{ }^\circ\text{C}$ | 15 | 15 | 15 | 15 | mA |

Thermal characteristics

| | | | | | | | |
|-------------------------------------|------------|--|------|------|------|------|--------------------|
| Thermal resistance, junction - case | R_{thJC} | | 0.65 | 0.65 | 0.65 | 0.65 | $^\circ\text{C/W}$ |
|-------------------------------------|------------|--|------|------|------|------|--------------------|

Figure .1-Typical Forward Characteristics

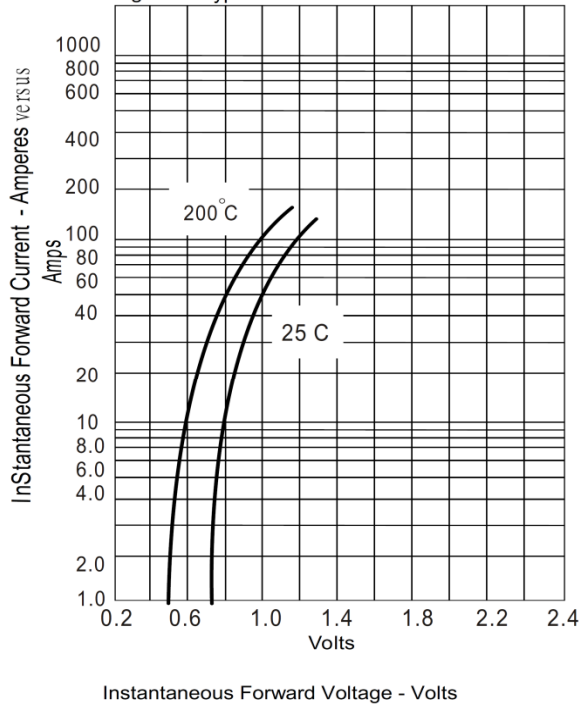


Figure .2-Forward Derating Curve

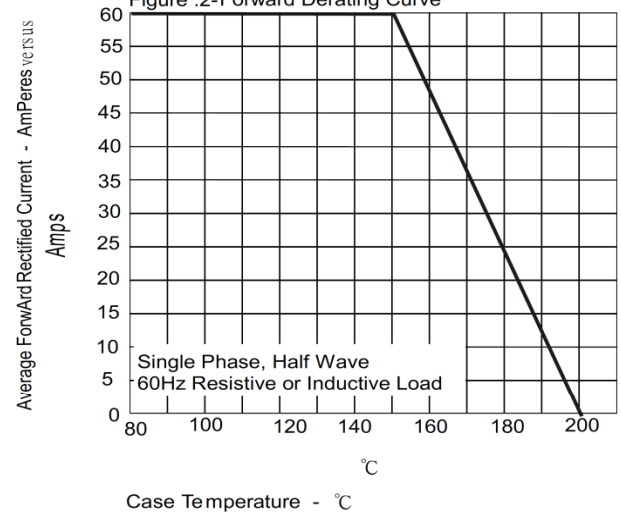


Figure .3-Peak Forward Surge Current

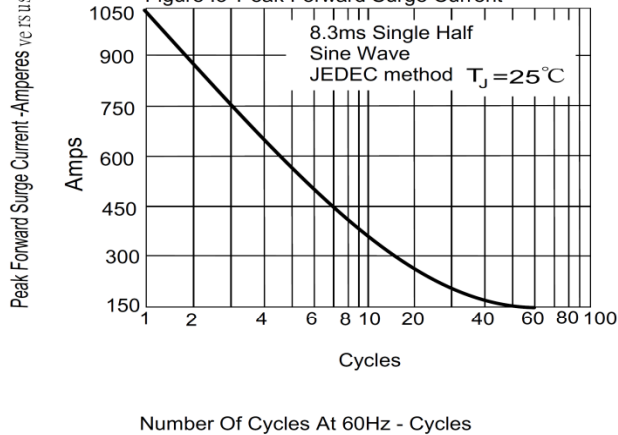


Figure .4-Typical Reverse Characteristics

