

Silicon Standard Recovery Diode

$V_{RRM} = 200\text{ V} - 1000\text{ V}$

$I_F = 150\text{ A}$

Features

- High Surge Capability
- Types from 200 V to 1000 V V_{RRM}
- Not ESD Sensitive

Note:

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

DO-8 Package



Maximum ratings, at $T_j = 25\text{ }^\circ\text{C}$, unless otherwise specified ("R" devices have leads reversed)

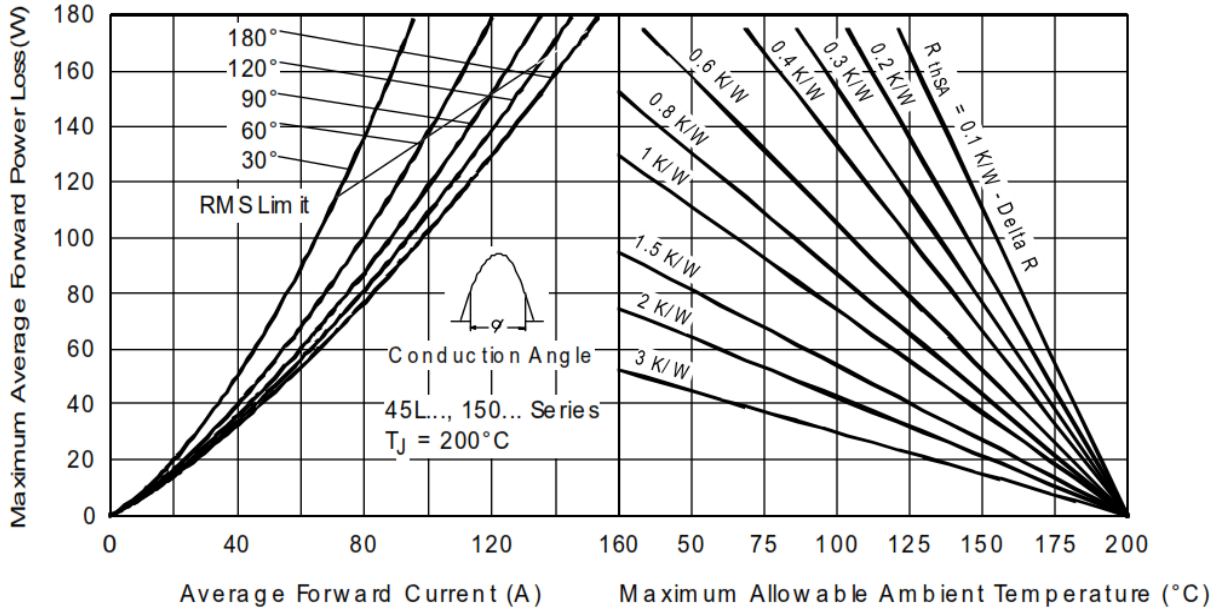
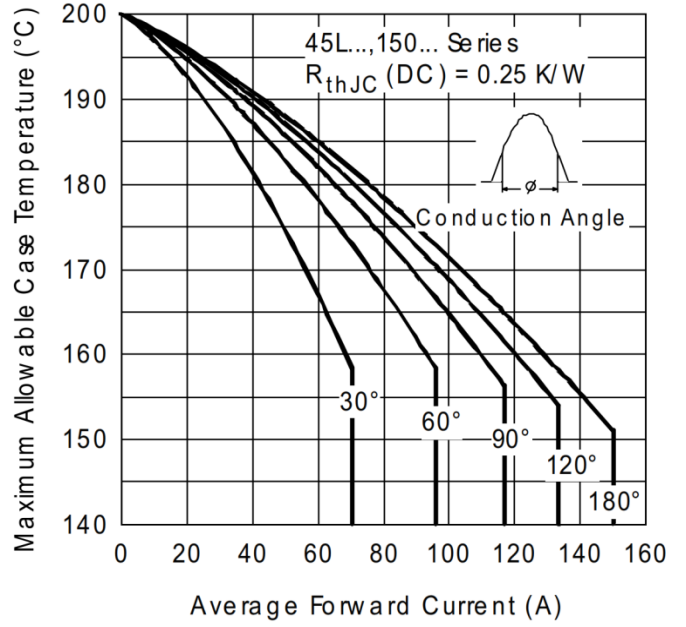
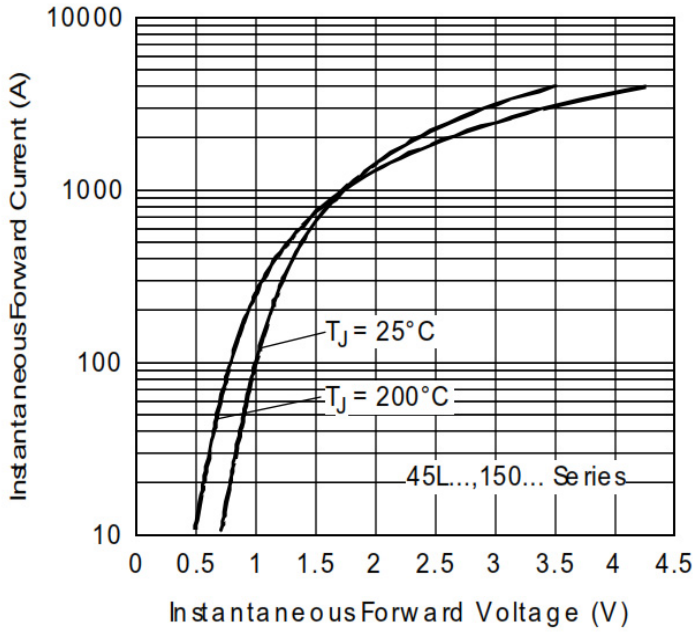
| Parameter | Symbol | Conditions | 150K(R)20A | 150K(R)40A | 150K(R)60A | 150K(R)80A | 150K(R)100A | Unit |
|--|------------|--|------------|------------|------------|------------|-------------|------------------------|
| Repetitive peak reverse voltage | V_{RRM} | | 200 | 400 | 600 | 800 | 1000 | V |
| DC blocking voltage | V_{DC} | | 200 | 400 | 600 | 800 | 1000 | V |
| Continuous forward current | I_F | $T_C \leq 110\text{ }^\circ\text{C}$ | 150 | 150 | 150 | 150 | 150 | A |
| Surge non-repetitive forward current, Half Sine Wave | $I_{F,SM}$ | $T_C = 25\text{ }^\circ\text{C}$, $t_p = 8.3\text{ ms}$ | 3740 | 3740 | 3740 | 3740 | 3740 | A |
| I_2t for fusing | I_2t | $t = 8.3\text{ms}$ | 58000 | 58000 | 58000 | 58000 | 58000 | A^2sec |
| Operating temperature | T_j | | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | $^\circ\text{C}$ |

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

| Parameter | Symbol | Conditions | 150K(R)20A | 150K(R)40A | 150K(R)60A | 150K(R)80A | 150K(R)100A | Unit |
|-----------------------|--------|---|------------|------------|------------|------------|-------------|------|
| Diode forward voltage | V_F | $I_F = 150\text{ A}$, $T_j = 25\text{ }^\circ\text{C}$ | 1.33 | 1.33 | 1.33 | 1.33 | 1.33 | V |
| Reverse current | I_R | $V_R = V_{RRM}$, $T_j = 175\text{ }^\circ\text{C}$ | 35 | 35 | 35 | 32 | 24 | mA |

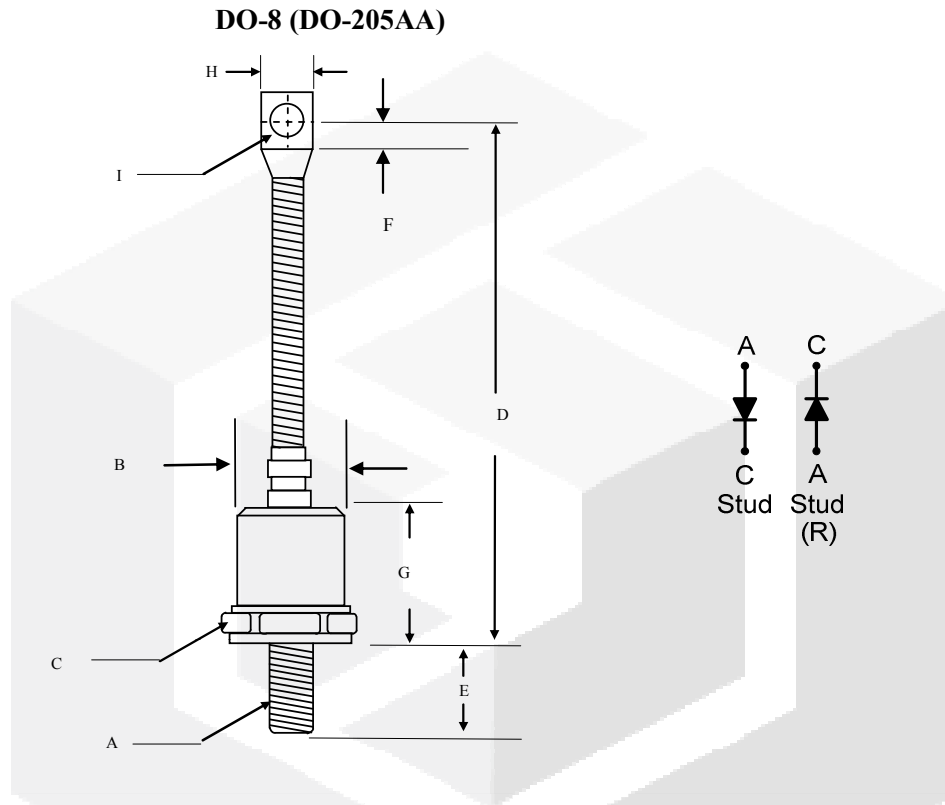
Thermal characteristics

| | | | | | | | | |
|-------------------------------------|------------|--|------|------|------|------|------|--------------------|
| Thermal resistance, junction - case | R_{thJC} | | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | $^\circ\text{C/W}$ |
|-------------------------------------|------------|--|------|------|------|------|------|--------------------|



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



| | Inches | | Millimeters | |
|---|------------|--------|-------------|--------|
| | Min | Max | Min | Max |
| A | 3/8-24 UNF | | | |
| B | ---- | φ0.930 | ---- | φ23.5 |
| C | 1.050 | 1.060 | 26.67 | 26.92 |
| D | 4.300 | 4.700 | 109.22 | 119.38 |
| E | ---- | 0.690 | ---- | 17.00 |
| F | 0.260 | ---- | 6.50 | ---- |
| G | ---- | 0.940 | ---- | 24.00 |
| H | ---- | 0.600 | ---- | 15.23 |
| I | 0.276 | 0.286 | 7.010 | 7.260 |