

## Press Fit Isolated Stud Mount SCR ½", 35 Amps

**Features**

- Improved glass passivation for high reliability
- Exceptional stability at high temperatures
- Metric thread type available
- Low thermal resistance



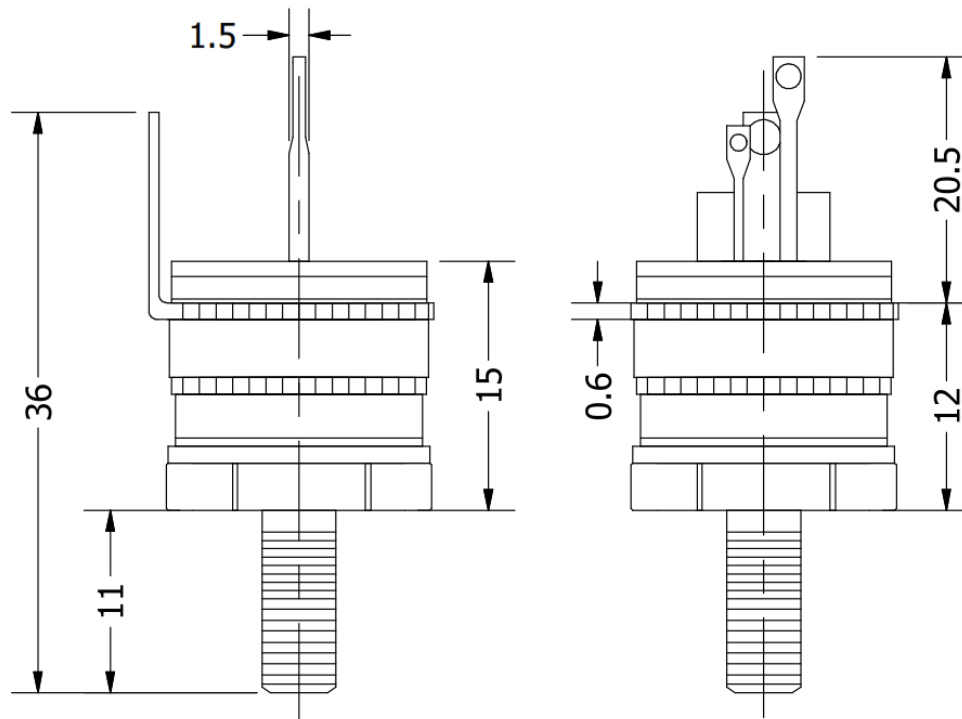
SC-66

| Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise specified) |                       |              |                    |
|---|-----------------------|--------------|--------------------|
| Parameter   | Symbol                | Part Numbers | Units              |
| Maximum repetitive peak reverse voltage, $V_{RRM}$                                | 50                    | NPIS350      | V                  |
|   | 100                   | NPIS351      |                    |
|   | 200                   | NPIS352      |                    |
|   | 400                   | NPIS354      |                    |
|   | 600                   | NPIS356      |                    |
| Maximum average forward output current  | $I_{T(RMS)}$          | 35           | A                  |
| Peak forward surge current, single half sine-wave                                 | $I_{TSM}$             | 350          | A                  |
| Peak gate trigger current   | $I_{GTM}$             | 2            | A                  |
| Peak gate power dissipation @ $I_{GT} \leq I_{GTM}$                               | $P_{GM}$              | 20           | W                  |
| Average gate power dissipation  | $P_{G(AV)}$           | 0.5          | W                  |
| Peak off-state current  | $I_{DRM}$ & $I_{RRM}$ | 1.0          | mA                 |
| Maximum instantaneous forward voltage drop @ 100 A                                | $V_{TM}$              | 1.6          | V                  |
| DC holding current  | $I_H$                 | 50           | mA                 |
| Critical rate-of-rise of off-state voltage  | $dv/dt$               | 200          | V/ $\mu\text{sec}$ |
| Gate trigger current  | $I_{GT}$              | 25           | mA                 |
| Gate trigger voltage  | $V_{GT}$              | 2.0          | V                  |
| Turn-on time  | $T_{gt}$              | 2.5          | $\mu\text{sec}$    |

| Thermal and Mechanical Specifications ( $T_A = 25^\circ\text{C}$ , unless otherwise noted) |                   |              |                           |
|--|-------------------|--------------|---------------------------|
| Parameters   | Symbol            | Values       | Units                     |
| Maximum operating junction temperature range   | $T_J$             | - 40 to +110 | $^\circ\text{C}$          |
| Maximum storage temperature range  | $T_{Stg}$         | - 40 to +150 | $^\circ\text{C}$          |
| Maximum thermal resistance, junction to case   | $R_{\theta(j-c)}$ | 1.6          | $^\circ\text{C}/\text{W}$ |
| Approximate weight   | $W$               | 30           | g                         |

## Package Outline

(All dimensions in mm)



## Ordering Table

| NPIS | 35 | 0,1,2,4,6 |
|------|----|-----------|
| 1    | 2  | 3         |

1 – Press Fit Isolated Stud Mount SCR

2 – Current,  $I_{F(AV)}$

3 – Voltage,  $V_{RRM}$  (See table)