

Press Fit Isolated Stud Mount SCR ½", 40 Amps

Features

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



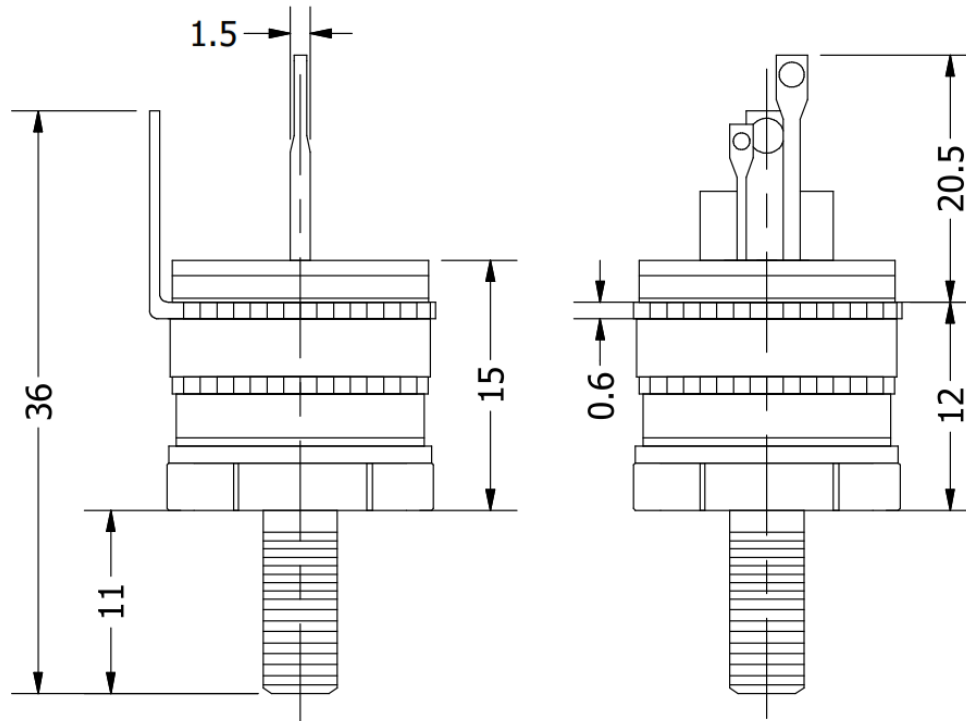
SC-66

| Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise specified) | | | |
|---|-----------------------|--------------|--------------------|
| Parameter | Symbol | Part Numbers | Units |
| Maximum repetitive peak reverse voltage, V_{RRM} | 50 | NPIS400 | V |
| | 100 | NPIS401 | |
| | 200 | NPIS402 | |
| | 400 | NPIS404 | |
| | 600 | NPIS406 | |
| Maximum average forward output current | $I_{T(AV)}$ | 40 | A |
| Peak forward surge current, single half sine-wave | I_{TSM} | 400 | 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/ μsec |
| Gate trigger current | I_{GT} | 25 | mA |
| Gate trigger voltage | V_{GT} | 2.0 | V |
| Turn-on time | Tgt | 2.5 | μsec |

| 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 | 40 | 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)