# Phase Control SCR

| Part Number | $V_{RRM}$ $V_{DRM}$ (V) | $I_{T(RMS)}$ (A) | $I_{T(AV)}$ (A) | @$T_C$ (°C) | $I_{TSM}$ (2) 50 Hz (A) | $I_{TSM}$ (2) 60 Hz (A) | (3) $V_{GT}$ (V) | (3) $I_{GT}$ (mA) | (4) $V_{TM}$ (V) | (5) dv/dt (V/µs) | $R_{thJC}$ DC (°C/W) | Notes | Fax-on-Demand Number | Case Style, (Case Outline) (1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Thyristors** | | | | | | | | | | | | | | |
| 10RIA10 | 100 | 25 | 10 | 85 | 190 | 200 | 2.0 | 60 | 1.75 | 300 | 1.85 | (6) | 30060 | TO-208AA (TO-48)(T1) |
| 10RIA20 | 200 | 25 | 10 | 85 | 190 | 200 | 2.0 | 60 | 1.75 | 300 | 1.85 | (6) | 30060 | |
| 10RIA40 | 400 | 25 | 10 | 85 | 190 | 200 | 2.0 | 60 | 1.75 | 300 | 1.85 | (6) | 30060 | |
| 10RIA60 | 600 | 25 | 10 | 85 | 190 | 200 | 2.0 | 60 | 1.75 | 300 | 1.85 | (6) | 30060 | |
| 10RIA80 | 800 | 25 | 10 | 85 | 190 | 200 | 2.0 | 60 | 1.75 | 300 | 1.85 | (6) | 30060 | |
| 10RIA100 | 1000 | 25 | 10 | 85 | 190 | 200 | 2.0 | 60 | 1.75 | 300 | 1.85 | (6) | 30060 | |
| 10RIA120 | 1200 | 25 | 10 | 85 | 190 | 200 | 2.0 | 60 | 1.75 | 300 | 1.85 | (6) | 30060 | |
| 2N681 | 25 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 2N682 | 50 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 2N683 | 100 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 2N684 | 150 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 2N685 | 200 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 2N686 | 250 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 2N687 | 300 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 2N688 | 400 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 2N689 | 500 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 2N690 | 600 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 2N691 | 700 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 2N692 | 800 | 25 | 16 | 65 | 145 | 150 | 2.0 | 40 | 2.00 | 250 | 1.50 | (6) | 30081 | |
| 16RIA10 | 100 | 35 | 16 | 85 | 285 | 300 | 2.0 | 60 | 1.75 | 300 | 1.15 | (6) | 30060 | |
| 16RIA20 | 200 | 35 | 16 | 85 | 285 | 300 | 2.0 | 60 | 1.75 | 300 | 1.15 | (6) | 30060 | |
| 16RIA40 | 400 | 35 | 16 | 85 | 285 | 300 | 2.0 | 60 | 1.75 | 300 | 1.15 | (6) | 30060 | |
| 16RIA60 | 600 | 35 | 16 | 85 | 285 | 300 | 2.0 | 60 | 1.75 | 300 | 1.15 | (6) | 30060 | |
| 16RIA80 | 800 | 35 | 16 | 85 | 285 | 300 | 2.0 | 60 | 1.75 | 300 | 1.15 | (6) | 30060 | |
| 16RIA100 | 1000 | 35 | 16 | 85 | 285 | 300 | 2.0 | 60 | 1.75 | 300 | 1.15 | (6) | 30060 | |
| 16RIA120 | 1200 | 35 | 16 | 85 | 285 | 300 | 2.0 | 60 | 1.75 | 300 | 1.15 | (6) | 30060 | |
| 16RIA140 | 1400 | 35 | 16 | 80 | 190 | 200 | 2.0 | 60 | 1.80 | 300 | 1.15 | (6) | 30060 | |
| 16RIA160 | 1600 | 35 | 16 | 80 | 190 | 200 | 2.0 | 60 | 1.80 | 300 | 1.15 | (6) | 30060 | |
| 2N5204 | 600 | 35 | 22 | 40 | 285 | 300 | 2.0 | 40 | 2.30 | 250 | 1.50 | | 30081 | |
| 2N5205 | 800 | 35 | 22 | 40 | 285 | 300 | 2.0 | 40 | 2.30 | 250 | 1.50 | | 30081 | |
| 2N5206 | 1000 | 35 | 22 | 40 | 285 | 300 | 2.0 | 40 | 2.30 | 250 | 1.50 | | 30081 | |
| 2N5207 | 1200 | 35 | 22 | 40 | 285 | 300 | 2.0 | 40 | 2.30 | 250 | 1.50 | | 30081 | |
| 22RIA10 | 100 | 35 | 22 | 85 | 335 | 355 | 2.0 | 60 | 1.70 | 300 | 0.86 | | 30060 | |
| 22RIA20 | 200 | 35 | 22 | 85 | 335 | 355 | 2.0 | 60 | 1.70 | 300 | 0.86 | | 30060 | |
| 22RIA40 | 400 | 35 | 22 | 85 | 335 | 355 | 2.0 | 60 | 1.70 | 300 | 0.86 | | 30060 | |
| 22RIA60 | 600 | 35 | 22 | 85 | 335 | 355 | 2.0 | 60 | 1.70 | 300 | 0.86 | | 30060 | |
| 22RIA80 | 800 | 35 | 22 | 85 | 335 | 355 | 2.0 | 60 | 1.70 | 300 | 0.86 | | 30060 | |
| 22RIA100 | 1000 | 35 | 22 | 85 | 335 | 355 | 2.0 | 60 | 1.70 | 300 | 0.86 | | 30060 | |
| 22RIA120 | 1200 | 35 | 22 | 85 | 335 | 355 | 2.0 | 60 | 1.70 | 300 | 0.86 | | 30060 | |
| 22RIA140 | 1400 | 35 | 22 | 80 | 285 | 300 | 2.0 | 60 | 1.80 | 300 | 0.86 | | 30060 | |
| 22RIA160 | 1600 | 35 | 22 | 80 | 285 | 300 | 2.0 | 60 | 1.80 | 300 | 0.86 | | 30060 | |
| 25RIA10 | 100 | 40 | 25 | 85 | 350 | 370 | 2.0 | 60 | 1.70 | 300 | 0.75 | | 30060 | |
| 25RIA20 | 200 | 40 | 25 | 85 | 350 | 370 | 2.0 | 60 | 1.70 | 300 | 0.75 | | 30060 | |
| 25RIA40 | 400 | 40 | 25 | 85 | 350 | 370 | 2.0 | 60 | 1.70 | 300 | 0.75 | | 30060 | |
| 25RIA60 | 600 | 40 | 25 | 85 | 350 | 370 | 2.0 | 60 | 1.70 | 300 | 0.75 | | 30060 | |
| 25RIA80 | 800 | 40 | 25 | 85 | 350 | 370 | 2.0 | 60 | 1.70 | 300 | 0.75 | | 30060 | |
| 25RIA100 | 1000 | 40 | 25 | 85 | 350 | 370 | 2.0 | 60 | 1.70 | 300 | 0.75 | | 30060 | |
| 25RIA120 | 1200 | 40 | 25 | 85 | 350 | 370 | 2.0 | 60 | 1.70 | 300 | 0.75 | | 30060 | |
| 25RIA140 | 1400 | 40 | 25 | 80 | 335 | 350 | 2.0 | 60 | 1.80 | 300 | 0.75 | | 30060 | |
| 25RIA160 | 1600 | 40 | 25 | 80 | 335 | 350 | 2.0 | 60 | 1.80 | 300 | 0.75 | | 30060 | |

Datasheet Directory

(1) See page 105 for Case Outline information
(2) 100% $V_{RRM}$ re-applied @ Tj = Tj max 125°C
(3) Tj = 25°C
(4) π X $I_{T(AV)}$ @ Tj = 25°C
(5) Exponential to 0.67 $V_{DRM}$; Tj = 125°C
(6) Available with metric stud. To order, add 'M' to part number, e.g. 10RIA10**M**.

TO-208AC
(TO-48)