

# INVERTER SCRs

| NATIONAL TYPE NO.  |      | C364<br>C365 | C376<br>C377       | C378             | C384<br>C385   | C387<br>C388   | C392<br>C393     | C394<br>C395   | C397<br>C398   |                  |
|--|------|--------------|--------------------|------------------|----------------|----------------|------------------|----------------|----------------|------------------|
| VOLTAGE RANGE  |      | 100-1000     | 500-1400           | 500-1400         | 100-1000       | 500-1200       | 100-1000         | 100-800        | 500-1400       |                  |
| <b>I<sub>TM</sub></b> Peak on-state sinusoidal current @ T <sub>c</sub> =65°C, 50% duty (A)  |      | —            | —                  | —                | —              | —              | —                | —              | —              |                  |
| @ 1 KHz  |      | 500          | 1000/1100          | 1050             | 850            | 600            | 600              | 1400           | 940            |                  |
| @ 5 KHz  |      | 280          | 800/975            | 850              | 450            | 120            | 120              | 570            | 300            |                  |
| @ 10 KHz   |      | 170          | 600/700            | 650              | 260            | —              | —                | 340            | 180            |                  |
| <b>I<sub>TSM</sub></b> Peak one cycle surge current (A)  |      | 1800         | 6000<br>7500       | 7000             | 3500           | 5500           | 5500             | 8000           | 7500           |                  |
| <b>I<sup>2</sup>t</b> For fusing at 8.3 msec (A <sup>2</sup> sec)  |      | 13500        | 150,000<br>230,000 | 200,000          | 50,000         | 120,000        | 120,000          | 250,000        | 230,000        |                  |
| <b>V<sub>TM</sub></b> Max. peak on-state volts @ peak amps., T <sub>J</sub> =25°C  |      | 2.6 @<br>500 | 1.8/2.2 @<br>1000  | 2.5 @<br>1000    | 2.85 @<br>1500 | 3.0 @<br>1000  | 3.0 @<br>1000    | 2.0 @<br>1000  | 2.4 @<br>1000  |                  |
| <b>di/dt</b> Max. Rate-of-rise of on-state current (A/μsec)  |      | 800          | 800                | 800              | 800            | 800            | 800              | 800            | 800            |                  |
| <b>dv/dt</b> Min. Rate-of-rise off-state voltage (V/μsec)  |      | 200          | 200                | 200              | 200            | 200            | 200              | 200            | 200            |                  |
| <b>t<sub>o</sub></b> Turn-off time at rated voltage and T <sub>J</sub> , with 200 v/μsec reapplied                                 |      | 10/20        | 20/40              | 30               | 10/20          | 40/30          | 14/20            | 10/15          | 50/30          |                  |
| <b>I<sub>GT</sub></b> Max. gate trigger current (MA) @ 25°C  |      | 150          | 300                | 300              | 300            | 300            | 300              | 300            | 300            |                  |
| <b>V<sub>GT</sub></b> Max. gate trigger voltage (V) @ 25°C   |      | 3.0          | 3.0                | 3.0              | 3.0            | 3.0            | 3.0              | 3.0            | 3.0            |                  |
| <b>R<sub>θJC</sub></b> Max. thermal resistance junction-to-case (°C/W)   |      | .13          | .06                | .06              | .09            | .06            | .06              | .06            | .06            |                  |
| <b>T<sub>J</sub></b> Max. junction operating temperature (°C)  |      | 125          | 125                | 125              | 125            | 125            | 125              | 125            | 125            |                  |
| REPETITIVE<br>PEAK<br>FORWARD<br>(V <sub>DRM</sub> )<br><br>AND<br>REPETITIVE<br>PEAK<br>REVERSE<br>(V <sub>RRM</sub> )<br>VOLTAGE | 100  | A            | C364A<br>C365A     |                  | C384A<br>C385A |                | C392A<br>C393A   | C394A<br>C395A |                |                  |
|  | 150  | G            | C364G<br>C365G     |                  | C384G<br>C385G |                | C392G<br>C393G   | C394G<br>C395G |                |                  |
|  | 200  | B            | C364B<br>C365B     |                  | C384B<br>C385B |                | C392B<br>C393B   | C394B<br>C395B |                |                  |
|  | 250  | H            | C364H<br>C365H     |                  | C384H<br>C385H |                | C392H<br>C393H   | C394H<br>C395H |                |                  |
|  | 300  | C            | C364C<br>C365C     |                  | C384C<br>C385C | C392C          | C394C<br>C393C   | C394C<br>C395C |                |                  |
|  | 400  | D            | C364D<br>C365D     |                  | C384D<br>C385D |                | C392D<br>C393D   | C394D<br>C395D |                |                  |
|  | 500  | E            | C364E<br>C365E     | C376E<br>C377E   | C378E          | C384E<br>C385E | C387E<br>C388E   | C392E<br>C393E | C394E<br>C395E | C397E<br>C398E   |
|  | 600  | M            | C364M<br>C365M     | C376M<br>C377M   | C378M          | C384M<br>C385M | C387M<br>C388M   | C392M<br>C393M | C394M<br>C395M | C397M<br>C398M   |
|  | 700  | S            | C364S<br>C365S     | C376S<br>C377S   | C378S          | C384S<br>C385S | C387S<br>C388S   | C393S          | C394S<br>C395S | C397S<br>C398S   |
|  | 800  | N            | C364N<br>C365N     | C376N<br>C377N   | C378N          | C384N<br>C385N | C387N<br>C388N   | C393N          | C395N          | C397N<br>C398N   |
|  | 900  | T            | C365T              | C376T<br>C377T   | C378T          | C385T          | C387T<br>C388T   | C393T          |                | C397T<br>C398T   |
|  | 1000 | P            | C365P              | C376P<br>C377P   | C378P          | C385P          | C387P<br>C388P   | C393P          |                | C397P<br>C398P   |
|  | 1100 | PA           |                    | C376PA<br>C377PA | C378PA         |                | C387PA<br>C388PA |                |                | C397PA<br>C398PA |
|  | 1200 | PB           |                    | C376PB<br>C377PB | C378PB         |                | C387PB<br>C388PB |                |                | C397PB<br>C398PB |
| 1300   | PC   |              | C376PC<br>C377PC   | C378PC           |                |                |                  |                | C397PC         |                  |
| 1400   | PD   |              | C376PD<br>C377PD   | C378PD           |                |                |                  |                | C397PD         |                  |
| Mounting Force (Lbs) Required  |      | 800          | 2000               | 2000             | 800            | 2000           | 2000             | 2000           | 2000           |                  |
| Package Type   |      | ½" P.P.      | 1" P.P.            | 1" P.P.          | ½" P.P.        | 1" P.P.        | 1" P.P.          | 1" P.P.        | 1" P.P.        |                  |
| Package Outline Number   |      | TO-200AB     | TO-200AC           | TO-200AC         | TO-200AB       | TO-200AC       | TO-200AC         | TO-200AC       | TO-200AC       |                  |