

## GENERAL PURPOSE ABRUPT VARACTOR DIODES 1N5681 TO 1N5709

| PART<br>NUMBER                                                                                                                                                                                                                                                                                                                                                                                                                                   | CAPACITANCE<br>@ 4Vdc<br>1 MHz (pF) | MIN QUALITY FACTOR<br>@ 4Vdc<br>F = 50 MHz | CAPACITANCE RATIO<br>2V / 40V |     | 4V / 60V |     | MAX WORKING<br>VOLTAGE<br>(Vdc) | MIN REVERSE<br>BREAKDOWN VOLTAGE<br>Ir = 10µA (Vdc) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------|-------------------------------|-----|----------|-----|---------------------------------|-----------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                     |                                            | MIN                           | TYP | MIN      | TYP |                                 |                                                     |
| 1N5681                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6.8                                 | 600                                        | 3.1                           | 3.3 |          |     | 40                              | 45                                                  |
| 1N5682                                                                                                                                                                                                                                                                                                                                                                                                                                           | 8.2                                 | 600                                        | 3.1                           | 3.3 |          |     | 40                              | 45                                                  |
| 1N5683                                                                                                                                                                                                                                                                                                                                                                                                                                           | 10.0                                | 550                                        | 3.2                           | 3.4 |          |     | 40                              | 45                                                  |
| 1N5684                                                                                                                                                                                                                                                                                                                                                                                                                                           | 12.0                                | 550                                        | 3.2                           | 3.4 |          |     | 40                              | 45                                                  |
| 1N5685                                                                                                                                                                                                                                                                                                                                                                                                                                           | 15.0                                | 550                                        | 3.2                           | 3.4 |          |     | 40                              | 45                                                  |
| 1N5686                                                                                                                                                                                                                                                                                                                                                                                                                                           | 18.0                                | 500                                        | 3.2                           | 3.4 |          |     | 40                              | 45                                                  |
| 1N5687                                                                                                                                                                                                                                                                                                                                                                                                                                           | 22.0                                | 500                                        | 3.3                           | 3.5 |          |     | 40                              | 45                                                  |
| 1N5688                                                                                                                                                                                                                                                                                                                                                                                                                                           | 27.0                                | 500                                        | 3.3                           | 3.5 |          |     | 40                              | 45                                                  |
| 1N5689                                                                                                                                                                                                                                                                                                                                                                                                                                           | 33.0                                | 500                                        | 3.3                           | 3.5 |          |     | 40                              | 45                                                  |
| 1N5690                                                                                                                                                                                                                                                                                                                                                                                                                                           | 39.0                                | 450                                        | 3.3                           | 3.5 |          |     | 40                              | 45                                                  |
| 1N5691                                                                                                                                                                                                                                                                                                                                                                                                                                           | 47.0                                | 400                                        | 3.3                           | 3.5 |          |     | 40                              | 45                                                  |
| 1N5692                                                                                                                                                                                                                                                                                                                                                                                                                                           | 56.0                                | 300                                        | 3.3                           | 3.5 |          |     | 40                              | 45                                                  |
| 1N5693                                                                                                                                                                                                                                                                                                                                                                                                                                           | 68.0                                | 250                                        | 3.3                           | 3.5 |          |     | 40                              | 45                                                  |
| 1N5694                                                                                                                                                                                                                                                                                                                                                                                                                                           | 82.0                                | 225                                        | 3.3                           | 3.5 |          |     | 40                              | 45                                                  |
| 1N5695                                                                                                                                                                                                                                                                                                                                                                                                                                           | 100.0                               | 200                                        | 3.3                           | 3.5 |          |     | 40                              | 45                                                  |
| 1N5696                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6.8                                 | 450                                        |                               |     | 2.7      | 2.9 | 60                              | 65                                                  |
| 1N5697                                                                                                                                                                                                                                                                                                                                                                                                                                           | 8.2                                 | 450                                        |                               |     | 2.7      | 2.9 | 60                              | 65                                                  |
| 1N5698                                                                                                                                                                                                                                                                                                                                                                                                                                           | 10.0                                | 400                                        |                               |     | 2.8      | 3.0 | 60                              | 65                                                  |
| 1N5699                                                                                                                                                                                                                                                                                                                                                                                                                                           | 12.0                                | 400                                        |                               |     | 2.8      | 3.0 | 60                              | 65                                                  |
| 1N5700                                                                                                                                                                                                                                                                                                                                                                                                                                           | 15.0                                | 400                                        |                               |     | 2.8      | 3.0 | 60                              | 65                                                  |
| 1N5701                                                                                                                                                                                                                                                                                                                                                                                                                                           | 18.0                                | 375                                        |                               |     | 2.8      | 3.0 | 60                              | 65                                                  |
| 1N5702                                                                                                                                                                                                                                                                                                                                                                                                                                           | 22.0                                | 375                                        |                               |     | 3.2      | 3.4 | 60                              | 65                                                  |
| 1N5703                                                                                                                                                                                                                                                                                                                                                                                                                                           | 27.0                                | 350                                        |                               |     | 3.2      | 3.4 | 60                              | 65                                                  |
| 1N5704                                                                                                                                                                                                                                                                                                                                                                                                                                           | 33.0                                | 350                                        |                               |     | 3.2      | 3.4 | 60                              | 65                                                  |
| 1N5705                                                                                                                                                                                                                                                                                                                                                                                                                                           | 39.0                                | 325                                        |                               |     | 3.2      | 3.4 | 60                              | 65                                                  |
| 1N5706                                                                                                                                                                                                                                                                                                                                                                                                                                           | 47.0                                | 300                                        |                               |     | 3.2      | 3.4 | 60                              | 65                                                  |
| 1N5707                                                                                                                                                                                                                                                                                                                                                                                                                                           | 56.0                                | 225                                        |                               |     | 3.2      | 3.4 | 60                              | 65                                                  |
| 1N5708                                                                                                                                                                                                                                                                                                                                                                                                                                           | 68.0                                | 175                                        |                               |     | 3.2      | 3.4 | 60                              | 65                                                  |
| 1N5709                                                                                                                                                                                                                                                                                                                                                                                                                                           | 82.0                                | 150                                        |                               |     | 3.2      | 3.4 | 60                              | 65                                                  |
| <div> <div> Package Style<br/>DC Power Dissipation<br/>Max Reverse Current (Ir)<br/>Max Reverse Current (Ir2)<br/>Operating Temperature (Topr)<br/>Storage Temperature (Tstg)<br/>Capacitance Tolerance: </div> <div> @ Ta = 25°C<br/>@ Ta = 150°C<br/><br/>Standard Device<br/>Suffix A<br/>Suffix B </div> <div> DO-7<br/>400 mW<br/>20 nA @ MWV<br/>20 µA @ MWV<br/>-65 to + 175°C<br/>-65 to + 200°C<br/>±20%<br/>±10%<br/>±5% </div> </div> |                                     |                                            |                               |     |          |     |                                 |                                                     |