



**LOW LEVEL ZENER DIODES**  
**ULTRA-LOW CURRENT: 50  $\mu$ A - LOW LEAKAGE**  
**1N4678 - 1N4714**

| PART<br>NUMBER                       | NOM ZENER<br>VOLTAGE<br>Vz @ 50 μA<br>(VOLTS) | MAX REVERSE<br>LEAKAGE CURRENT<br>Ir @ Vr<br>(μAdc) (Vdc) | MAX REGULATION<br>FACTOR 100 μAdc<br>TO 10 μAdc<br>ΔVz (VOLTS) | MAX REGULATOR<br>CURRENT Izm<br>(mAdc) |
|--------------------------------------|-----------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------------|----------------------------------------|
| 1N4678                               | 1.8                                           | 7.5                                                       | 1.0                                                            | 120.0                                  |
| 1N4679                               | 2.0                                           | 5.0                                                       | 1.0                                                            | 110.0                                  |
| 1N4680                               | 2.2                                           | 4.0                                                       | 1.0                                                            | 100.0                                  |
| 1N4681                               | 2.4                                           | 2.0                                                       | 1.0                                                            | 95.0                                   |
| 1N4682                               | 2.7                                           | 1.0                                                       | 1.0                                                            | 90.0                                   |
| 1N4683                               | 3.0                                           | 0.8                                                       | 1.0                                                            | 85.0                                   |
| 1N4684                               | 3.3                                           | 7.5                                                       | 1.5                                                            | 80.0                                   |
| 1N4685                               | 3.6                                           | 7.5                                                       | 2.0                                                            | 75.0                                   |
| 1N4686                               | 3.9                                           | 5.0                                                       | 2.0                                                            | 70.0                                   |
| 1N4687                               | 4.3                                           | 4.0                                                       | 2.0                                                            | 65.0                                   |
| 1N4688                               | 4.7                                           | 10.0                                                      | 3.0                                                            | 60.0                                   |
| 1N4689                               | 5.1                                           | 10.0                                                      | 3.0                                                            | 55.0                                   |
| 1N4690                               | 5.6                                           | 10.0                                                      | 4.0                                                            | 50.0                                   |
| 1N4691                               | 6.2                                           | 10.0                                                      | 5.0                                                            | 45.0                                   |
| 1N4692                               | 6.8                                           | 10.0                                                      | 5.1                                                            | 35.0                                   |
| 1N4693                               | 7.5                                           | 10.0                                                      | 5.7                                                            | 31.8                                   |
| 1N4694                               | 8.2                                           | 1.0                                                       | 6.2                                                            | 29.0                                   |
| 1N4695                               | 8.7                                           | 1.0                                                       | 6.6                                                            | 27.4                                   |
| 1N4696                               | 9.1                                           | 1.0                                                       | 6.9                                                            | 26.2                                   |
| 1N4697                               | 10.0                                          | 1.0                                                       | 7.6                                                            | 24.8                                   |
| 1N4698                               | 11.0                                          | 0.05                                                      | 8.4                                                            | 21.6                                   |
| 1N4699                               | 12.0                                          | 0.05                                                      | 9.1                                                            | 20.4                                   |
| 1N4700                               | 13.0                                          | 0.05                                                      | 9.8                                                            | 19.0                                   |
| 1N4701                               | 14.0                                          | 0.05                                                      | 10.6                                                           | 17.5                                   |
| 1N4702                               | 15.0                                          | 0.05                                                      | 11.4                                                           | 16.3                                   |
| 1N4703                               | 16.0                                          | 0.05                                                      | 12.1                                                           | 15.4                                   |
| 1N4704                               | 17.0                                          | 0.05                                                      | 12.9                                                           | 14.5                                   |
| 1N4705                               | 18.0                                          | 0.05                                                      | 13.6                                                           | 13.2                                   |
| 1N4706                               | 19.0                                          | 0.05                                                      | 14.4                                                           | 12.5                                   |
| 1N4707                               | 20.0                                          | 0.01                                                      | 15.2                                                           | 11.9                                   |
| 1N4708                               | 22.0                                          | 0.01                                                      | 16.7                                                           | 10.8                                   |
| 1N4709                               | 24.0                                          | 0.01                                                      | 18.2                                                           | 9.9                                    |
| 1N4710                               | 25.0                                          | 0.01                                                      | 19.0                                                           | 9.5                                    |
| 1N4711                               | 27.0                                          | 0.01                                                      | 20.4                                                           | 8.8                                    |
| 1N4712                               | 28.0                                          | 0.01                                                      | 21.2                                                           | 8.5                                    |
| 1N4713                               | 30.0                                          | 0.01                                                      | 22.8                                                           | 7.9                                    |
| 1N4714                               | 33.0                                          | 0.01                                                      | 25.0                                                           | 7.2                                    |
| Package Style<br>Vz tolerance: ± 5%. |                                               | DO-7                                                      |                                                                |                                        |