

**1N4838A-1N4874**

| TYPE    | MATERIAL | REPLACEMENT | PAGE NUMBER | IDENTIFICATION | RECTIFIERS       |                          |                 |               |                       | ZENER DIODES     |               |               |               |
|---------|----------|-------------|-------------|----------------|------------------|--------------------------|-----------------|---------------|-----------------------|------------------|---------------|---------------|---------------|
|         |          |             |             |                | $V_R$<br>(volts) | $V_F$<br>(volts)         | $I_O$<br>(Amps) | $I_R$<br>(mA) | $I_{surge}$<br>(Amps) | $V_Z$ (min)      | $V_Z$ (nom) * | Tol           | $P_D$         |
|         |          |             |             |                | SIGNAL DIODES    |                          |                 |               |                       | REFERENCE DIODES |               |               |               |
|         |          |             |             |                | PRV<br>(volts)   | $V_F$ @ $I_F$<br>(volts) | $I_F$           | $I_R$         | $C_T$<br>( $\mu s$ )  | TC<br>%/°C       | $V_Z$         | T (min)<br>°C | T (max)<br>°C |
| 1N4838A | S        | 1N4746      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 18*           | 10            | 1.2W          |
| 1N4838B | S        | 1N4746A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 18*           | 5.0           | 1.2W          |
| 1N4839  | S        | 1N4747      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 20*           | 20            | 1.2W          |
| 1N4839A | S        | 1N4747      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 20*           | 10            | 1.2W          |
| 1N4839B | S        | 1N4747A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 20*           | 5.0           | 1.2W          |
| 1N4840  | S        | 1N4748      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 22*           | 20            | 1.2W          |
| 1N4840A | S        | 1N4748      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 22*           | 10            | 1.2W          |
| 1N4840B | S        | 1N4748A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 22*           | 5.0           | 1.2W          |
| 1N4841  | S        | 1N4749      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 24*           | 20            | 1.2W          |
| 1N4841A | S        | 1N4749      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 24*           | 10            | 1.2W          |
| 1N4841B | S        | 1N4749A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 24*           | 5.0           | 1.2W          |
| 1N4842  | S        | 1N4750      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 27*           | 20            | 1.2W          |
| 1N4842A | S        | 1N4750      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 27*           | 10            | 1.2W          |
| 1N4842B | S        | 1N4750A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 27*           | 5.0           | 1.2W          |
| 1N4843  | S        | 1N4751      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 30*           | 20            | 1.2W          |
| 1N4843A | S        | 1N4751      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 30*           | 10            | 1.2W          |
| 1N4843B | S        | 1N4751A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 30*           | 5.0           | 1.2W          |
| 1N4844  | S        | 1N4752      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 33*           | 20            | 1.2W          |
| 1N4844A | S        | 1N4752      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 33*           | 10            | 1.2W          |
| 1N4844B | S        | 1N4752A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 33*           | 5.0           | 1.2W          |
| 1N4845  | S        | 1N4753      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 36*           | 20            | 1.2W          |
| 1N4845A | S        | 1N4753      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 36*           | 10            | 1.2W          |
| 1N4845B | S        | 1N4753A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 36*           | 5.0           | 1.2W          |
| 1N4846  | S        | 1N4754      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 39*           | 20            | 1.2W          |
| 1N4846A | S        | 1N4754      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 39*           | 10            | 1.2W          |
| 1N4846B | S        | 1N4754A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 39*           | 5.0           | 1.2W          |
| 1N4847  | S        | 1N4755      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 43*           | 20            | 1.2W          |
| 1N4847A | S        | 1N4755      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 43*           | 10            | 1.2W          |
| 1N4847B | S        | 1N4755A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 43*           | 5.0           | 1.2W          |
| 1N4848  | S        | 1N4756      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 47*           | 20            | 1.2W          |
| 1N4848A | S        | 1N4756      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 47*           | 10            | 1.2W          |
| 1N4848B | S        | 1N4756A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 47*           | 5.0           | 1.2W          |
| 1N4849  | S        | 1N4757      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 51*           | 20            | 1.2W          |
| 1N4849A | S        | 1N4757      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 51*           | 10            | 1.2W          |
| 1N4849B | S        | 1N4757A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 51*           | 5.0           | 1.2W          |
| 1N4850  | S        | 1N4758      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 56*           | 20            | 1.2W          |
| 1N4850A | S        | 1N4758      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 56*           | 10            | 1.2W          |
| 1N4850B | S        | 1N4758A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 56*           | 5.0           | 1.2W          |
| 1N4851  | S        | 1N4759      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 62*           | 20            | 1.2W          |
| 1N4851A | S        | 1N4759      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 62*           | 10            | 1.2W          |
| 1N4851B | S        | 1N4759A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 62*           | 5.0           | 1.2W          |
| 1N4852  | S        | 1N4760      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 68*           | 20            | 1.2W          |
| 1N4852A | S        | 1N4760      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 68*           | 10            | 1.2W          |
| 1N4852B | S        | 1N4760A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 68*           | 5.0           | 1.2W          |
| 1N4853  | S        | 1N4761      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 75*           | 20            | 1.2W          |
| 1N4853A | S        | 1N4761      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 75*           | 10            | 1.2W          |
| 1N4853B | S        | 1N4761A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 75*           | 5.0           | 1.2W          |
| 1N4854  | S        | 1N4762      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 82*           | 20            | 1.2W          |
| 1N4854A | S        | 1N4762      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 82*           | 10            | 1.2W          |
| 1N4854B | S        | 1N4762A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 82*           | 5.0           | 1.2W          |
| 1N4855  | S        | 1N4763      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 91*           | 20            | 1.2W          |
| 1N4855A | S        | 1N4763      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 91*           | 10            | 1.2W          |
| 1N4855B | S        | 1N5763A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 91*           | 5.0           | 1.2W          |
| 1N4856  | S        | 1N5764      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 100*          | 20            | 1.2W          |
| 1N4856A | S        | 1N5764      | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 100*          | 10            | 1.2W          |
| 1N4856B | S        | 1N5764A     | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 100*          | 5.0           | 1.2W          |
| 1N4857  | S        | 1M1102S10   | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 110*          | 20            | 1.2W          |
| 1N4857A | S        | 1M1102S10   | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 110*          | 10            | 1.2W          |
| 1N4857B | S        | 1M1102S5    | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 110*          | 5.0           | 1.2W          |
| 1N4858  | S        | 1M1202S10   | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 120*          | 20            | 1.2W          |
| 1N4858A | S        | 1M1202S10   | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 120*          | 10            | 1.2W          |
| 1N4858B | S        | 1M1202S5    | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 120*          | 5.0           | 1.2W          |
| 1N4859  | S        | 1M1302S10   | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 130*          | 20            | 1.2W          |
| 1N4859A | S        | 1M1302S10   | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 130*          | 10            | 1.2W          |
| 1N4859B | S        | 1M1302S5    | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 130*          | 5.0           | 1.2W          |
| 1N4860  | S        | 1M1502S10   | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 150*          | 20            | 1.2W          |
| 1N4860A | S        | 1M1502S10   | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 150*          | 10            | 1.2W          |
| 1N4860B | S        | 1M1502S5    | 2-29        | ZD             |                  |                          |                 |               |                       |                  | 150*          | 5.0           | 1.2W          |
| 1N4861  | S        |             |             | GP             | 50               | 1.2                      | 0.1A            | 2.0N          | 1.0                   |                  |               |               |               |
| 1N4862  | S        |             |             | GP             | 50               | 1.1                      | 0.1A            | 5.0N          | 1.0                   |                  |               |               |               |
| 1N4863  | S        |             |             | HS             | 50               | 1.2                      | 0.1A            | 50N           | 7.0                   |                  |               |               |               |
| 1N4864  | S        |             |             | HS             | 80               | 1.1                      | 0.1A            | 0.1*          | 9.0                   |                  |               |               |               |
| 1N4865  | S        |             |             | R              | 1500             | 2.4                      | 1.25            | 0.6           | 150                   |                  |               |               |               |
| 1N4866  | S        |             |             | R              | 2500             | 3.6                      | 1.25            | 0.6           | 150                   |                  |               |               |               |
| 1N4867  | S        |             |             | R              | 3000             | 4.8                      | 1.25            | 0.6           | 150                   |                  |               |               |               |
| 1N4868  | S        |             |             | R              | 5000             | 8.4                      | 1.25            | 0.6           | 150                   |                  |               |               |               |
| 1N4869  | S        |             |             | R              | 7500             | 12                       | 1.25            | 0.6           | 150                   |                  |               |               |               |
| 1N4870  | S        |             |             | R              | 10K              | 16                       | 1.25            | 0.6           | 150                   |                  |               |               |               |
| 1N4871  | S        |             |             | R              | 12K              | 18                       | 1.25            | 0.6           | 150                   |                  |               |               |               |
| 1N4872  | S        |             |             | R              | 15K              | 23                       | 1.25            | 0.6           | 150                   |                  |               |               |               |
| 1N4873  | S        |             |             | R              | 20K              | 30                       | 1.25            | 0.6           | 150                   |                  |               |               |               |
| 1N4874  | S        |             |             | R              | 25K              | 38                       | 1.25            | 0.6           | 150                   |                  |               |               |               |

R—Rectifier, RD—Reference Diode, ZD—Zener Diode, GP—General Purpose, HC—High Conductance ( $\geq 20 \text{ mA} @ \leq 1 \text{ V}$ ), HS—High Speed Switch (Max  $t_r < 0.3 \mu s$ ), CS—High Conductance, High Speed Switch, MS—Medium Speed Switch, PA—Parametric Amplifier, SP—Special Purpose.