

1N1517A-1N1590A

| TYPE | MATERIAL | REPLACEMENT | PAGE NUMBER | IDENTIFICATION | RECTIFIERS | | | | | ZENER DIODES | | | |
|---------|----------|-------------|-------------|----------------|------------------|--------------------------|-----------------|---------------------|-----------------------|------------------|---------------|---------------|-------|
| | | | | | V_R (volts) | V_F (volts) | I_O (Amps) | I_R (mA) | I_{surge} (Amps) | V_Z (min) | V_Z (nom) * | Tol | P_D |
| | | | | | SIGNAL DIODES | | | | | REFERENCE DIODES | | | |
| | | | | | PRV (volts) | V_F @ I_F (volts) | I_R | t_r (μ s) | TC %/°C | V_Z | T (min) °C | T (max) °C | |
| 1N1517A | S | | 2-14 | ZD | | | | | | | 27* | 5.0 | 750M |
| 1N1518 | S | | 2-14 | ZD | | | | | | | 3.9* | 10 | 1.0W |
| 1N1518A | S | | 2-14 | ZD | | | | | | | 3.9* | 5.0 | 1.0W |
| 1N1519 | S | | 2-14 | ZD | | | | | | | 4.7* | 10 | 1.0W |
| 1N1519A | S | | 2-14 | ZD | | | | | | | 4.7* | 5.0 | 1.0W |
| 1N1520 | S | | 2-14 | ZD | | | | | | | 5.6* | 10 | 1.0W |
| 1N1520A | S | | 2-14 | ZD | | | | | | | 5.6* | 5.0 | 1.0W |
| 1N1521 | S | | 2-14 | ZD | | | | | | | 6.8* | 10 | 1.0W |
| 1N1521A | S | | 2-14 | ZD | | | | | | | 6.8* | 5.0 | 1.0W |
| 1N1522 | S | | 2-14 | ZD | | | | | | | 8.2* | 10 | 1.0W |
| 1N1522A | S | | 2-14 | ZD | | | | | | | 8.2* | 5.0 | 1.0W |
| 1N1523 | S | | 2-14 | ZD | | | | | | | 10* | 10 | 1.0W |
| 1N1523A | S | | 2-14 | ZD | | | | | | | 10* | 5.0 | 1.0W |
| 1N1524 | S | | 2-14 | ZD | | | | | | | 12* | 10 | 1.0W |
| 1N1524A | S | | 2-14 | ZD | | | | | | | 12* | 5.0 | 1.0W |
| 1N1525 | S | | 2-14 | ZD | | | | | | | 15* | 10 | 1.0W |
| 1N1525A | S | | 2-14 | ZD | | | | | | | 15* | 5.0 | 1.0W |
| 1N1526 | S | | 2-14 | ZD | | | | | | | 18* | 10 | 1.0W |
| 1N1526A | S | | 2-14 | ZD | | | | | | | 18* | 5.0 | 1.0W |
| 1N1527 | S | | 2-14 | ZD | | | | | | | 22* | 10 | 1.0W |
| 1N1527A | S | | 2-14 | ZD | | | | | | | 22* | 5.0 | 1.0W |
| 1N1528 | S | | 2-14 | ZD | | | | | | | 27* | 10 | 1.0W |
| 1N1528A | S | | 2-14 | ZD | | | | | | | 27* | 5.0 | 1.0W |
| 1N1530 | S | | 2-45 | RD | | | | | | | 8.4 | -55 | 100 |
| 1N1530A | S | | 2-45 | RD | | | | | | | 8.4 | -55 | 100 |
| 1N1537 | S | | | R | 50 | 1.5 | 1.6 | 0.05 | | | | | |
| 1N1538 | S | 1N4002 | 3-24 | R | 100 | 1.5 | 1.6 | 0.05 | | | | | |
| 1N1539 | S | 1N4003 | 3-24 | R | 150 | 1.5 | 1.6 | 0.05 | | | | | |
| 1N1540 | S | 1N4003 | 3-24 | R | 200 | 1.5 | 1.6 | 0.05 | | | | | |
| 1N1541 | S | 1N4004 | 3-24 | R | 300 | 1.5 | 1.6 | 0.05 | | | | | |
| 1N1542 | S | 1N4004 | 3-24 | R | 400 | 1.5 | 1.6 | 0.05 | | | | | |
| 1N1543 | S | 1N4005 | 3-24 | R | 500 | 1.5 | 1.6 | 0.05 | | | | | |
| 1N1544 | S | 1N4005 | 3-24 | R | 600 | 1.5 | 1.6 | 0.05 | | | | | |
| 1N1551 | S | | | R | 100 | 1.4 | | 1.0 | | | | | |
| 1N1552 | S | | | R | 200 | 1.4 | | 1.0 | | | | | |
| 1N1553 | S | | | R | 300 | 1.4 | | 1.0 | | | | | |
| 1N1554 | S | | | R | 400 | 1.4 | | 1.0 | | | | | |
| 1N1555 | S | | | R | 500 | 1.4 | | 1.0 | | | | | |
| 1N1556 | S | | | R | 100 | 1.4 | | 1.0 | | | | | |
| 1N1557 | S | | | R | 200 | 1.4 | | 1.0 | | | | | |
| 1N1558 | S | | | R | 300 | 1.4 | | 1.0 | | | | | |
| 1N1559 | S | | | R | 400 | 1.4 | | 1.0 | | | | | |
| 1N1560 | S | | | R | 500 | 1.4 | | 1.0 | | | | | |
| 1N1561 | G | | | HC | 25 | 0.4 | 12M | 25* | | | | | |
| 1N1562 | G | | | HC | 25 | 0.4 | 8.0M | 25* | | | | | |
| 1N1563 | S | | | R | 100 | 1.5 | 1.0 | 0.003 | 70 | | | | |
| 1N1563A | S | | | R | 100 | 1.5 | 1.5 | 0.003 | 70 | | | | |
| 1N1564 | S | | | R | 200 | 1.5 | 1.0 | 0.003 | 70 | | | | |
| 1N1564A | S | | | R | 200 | 1.5 | 1.5 | 0.003 | 70 | | | | |
| 1N1565 | S | | | R | 300 | 1.5 | 1.0 | 0.003 | 70 | | | | |
| 1N1565A | S | | | R | 300 | 1.5 | 1.5 | 0.003 | 70 | | | | |
| 1N1566 | S | | | R | 400 | 1.5 | 1.0 | 0.003 | 70 | | | | |
| 1N1566A | S | | | R | 400 | 1.5 | 1.5 | 0.003 | 70 | | | | |
| 1N1567 | S | | | R | 500 | 1.2 | 1.0 | 0.005 | 70 | | | | |
| 1N1567A | S | | | R | 500 | 1.5 | 1.5 | 0.003 | 70 | | | | |
| 1N1568 | S | | | R | 600 | 1.2 | 1.0 | 0.005 | 70 | | | | |
| 1N1568A | S | | | R | 600 | 1.5 | 1.5 | 0.003 | 70 | | | | |
| 1N1569 | S | | | R | 100 | 1.5 | 1.0 | 0.005 | 70 | | | | |
| 1N1570 | S | | | R | 200 | 1.5 | 1.0 | 0.005 | 70 | | | | |
| 1N1571 | S | | | R | 300 | 1.5 | 1.0 | 0.005 | 70 | | | | |
| 1N1572 | S | | | R | 400 | 1.5 | 1.0 | 0.005 | 70 | | | | |
| 1N1573 | S | | | R | 500 | 1.5 | 1.0 | 0.005 | 70 | | | | |
| 1N1574 | S | | | R | 600 | 1.5 | 1.0 | 0.005 | 70 | | | | |
| 1N1575 | S | | | R | 100 | 1.5 | 3.5 | 0.005 | 70 | | | | |
| 1N1576 | S | | | R | 200 | 1.5 | 3.5 | 0.005 | 70 | | | | |
| 1N1577 | S | | | R | 300 | 1.5 | 3.5 | 0.005 | 70 | | | | |
| 1N1578 | S | | | R | 400 | 1.5 | 3.5 | 0.005 | 70 | | | | |
| 1N1579 | S | | | R | 500 | 1.5 | 3.5 | 0.005 | 70 | | | | |
| 1N1580 | S | | | R | 600 | 1.5 | 3.5 | 0.005 | 70 | | | | |
| 1N1581 | S | MR1120 | 3-39 | R | 50 | 1.5 | 3.0 | 5.0 | 40 | | | | |
| 1N1582 | S | MR1121 | 3-39 | R | 100 | 1.5 | 3.0 | 5.0 | 40 | | | | |
| 1N1583 | S | MR1122 | 3-39 | R | 200 | 1.5 | 3.0 | 5.0 | 40 | | | | |
| 1N1584 | S | MR1123 | 3-39 | R | 300 | 1.5 | 3.0 | 5.0 | 40 | | | | |
| 1N1585 | S | MR1124 | 3-39 | R | 400 | 1.5 | 3.0 | 5.0 | 40 | | | | |
| 1N1586 | S | MR1125 | 3-39 | R | 500 | 1.5 | 3.0 | 5.0 | 40 | | | | |
| 1N1587 | S | MR1126 | 3-39 | R | 600 | 1.5 | 3.0 | 5.0 | 40 | | | | |
| 1N1588 | S | | 2-14 | ZD | | | | | | | 3.9* | 10 | 3.5W |
| 1N1588A | S | | 2-14 | ZD | | | | | | | 3.9* | 5.0 | 3.5W |
| 1N1589 | S | | 2-14 | ZD | | | | | | | 4.7* | 10 | 3.5W |
| 1N1589A | S | | 2-14 | ZD | | | | | | | 4.7* | 5.0 | 3.5W |
| 1N1590 | S | | 2-14 | ZD | | | | | | | 5.6* | 10 | 3.5W |
| 1N1590A | S | | 2-14 | ZD | | | | | | | 5.6* | 5.0 | 3.5W |

R—Rectifier, RD—Reference Diode, ZD—Zener Diode, GP—General Purpose, HC—High Conductance (≥ 20 mA @ ≤ 1 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.

1N1563, A thru 1N1568, A

V_R — to 600 V
 $I_O = 1.5$ A



CASE 55

Low-current silicon rectifiers in hermetically sealed, low-silhouette single-ended package designed to operate under military environmental conditions. Cathode connected to case, but reverse polarity devices are available on special order.

MAXIMUM RATINGS (At 60 cps Sinusoidal Input, Resistive or Inductive Load)

| Rating | Symbol | 1N1563A 1N1563 | 1N1564A 1N1564 | 1N1565A 1N1565 | 1N1566A 1N1566 | 1N1567A 1N1567 | 1N1568A 1N1568 | Unit |
|--|------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------|
| Peak Repetitive Reverse Voltage DC Blocking Voltage | $V_{RM(rep)}$ V_R | 100 | 200 | 300 | 400 | 500 | 600 | Volts |
| RMS Reverse Voltage | V_r | 70 | 140 | 210 | 280 | 350 | 420 | Volts |
| Average Half-Wave Rectified Forward Current (55°C Ambient) (150°C Ambient) | I_O | 1500 300 | 1500 300 | 1500 300 | 1500 300 | 1500 300 | 1500 300 | mA mA |
| Peak Surge Current (1/2 Cycle Surge, 60 Hz) | $I_{FM(surge)}$ | 70 | 70 | 70 | 70 | 70 | 70 | Amp |
| Peak Repetitive Forward Current | $I_{FM(rep)}$ | 10 | 10 | 10 | 10 | 10 | 10 | Amp |
| Operating and Storage Temperature Range | T_J T_{stg} | -65 to +175 | | | | | | °C |

ELECTRICAL CHARACTERISTICS

| Characteristic | Symbol | 1N1563A - 1N1568A Rating | 1N1563 - 1N1568 Rating | Unit |
|---|-------------|--------------------------------|------------------------------|---------|
| Maximum Forward Voltage Drop @ 500 mA, (25°C) Continuous DC (150°C) | V_F | 1.2 0.9 | 1.2 1.0 | Volts |
| Maximum Reverse Current @ Rated DC Voltage (25°C) | I_R | 1.5 | | μ A |
| Maximum Full-Cycle Average Reverse Current (25°C) @ Max Rated PIV and Current (as Half-Wave (150°C) Rectifier, Resistive Load | $I_{R(AV)}$ | 3.0 150 | 5.0 500 | μ A |

