

| Part No.<br>Replacement No. Mfr.   | Part No.<br>Replacement No. Mfr.   | Part No.<br>Replacement No. Mfr.  | Part No.<br>Replacement No. Mfr.  | Part No.<br>Replacement No. Mfr.  | Part No.<br>Replacement No. Mfr.                            | Part No.<br>Replacement No. Mfr.   |
|--|--|---|---|---|---|--|
| <b>2N2284</b><br>2N1041 1 LTE<br>DE176 3 DGE   | <b>2N2316</b><br>2N3020 1 MOTA<br>2N1893 3 RCA<br>2N4305 3 TRWS<br>D38H4 3 GESY<br>DE128 3 DGE<br>THC3020 3 SPR<br>TN3020 3 NSC  | <b>2N2368 (Cont'd)</b><br>BSX19 3 SGSI<br>D40D7 3 GESY<br>DE123AP 3 DGE<br>SD1300 3 THCS<br>THC3903 3 SPR<br>TMPT3903 3 SPR   | <b>2N2391</b><br>2N3250 1 MOTA<br>2N2905 3 PHIN<br>2N3905 3 NSC<br>DE159 3 DGE<br>GES3250 3 GESY<br>THC3250 3 SPR<br>TP3250 3 SPR   | <b>2N2410 (Cont'd)</b><br>2N4307 3 TRWS<br>2N5321 3 RCA<br>BCX55-10 3 SIEG<br>BSS79C 3 SIEG<br>D40D4 3 GESY<br>DE324 3 DGE<br>GES3053 3 GESY<br>THC3053 3 SPR | <b>2N2447 (Cont'd)</b><br>DE126A 1 DGE                      | <b>2N2448</b><br>2N1187 1 LTE<br>DE126A 1 DGE<br>DE102 3 DGE   |
| <b>2N2286</b><br>DE121 1 DGE   | <b>2N2317</b><br>2N2193A 1 MOTA<br>D40D7 3 GESY  | <b>2N2369</b><br>2N3903 1 GESY<br>BCW60A 1 SIEG<br>DE123A 1 DGE<br>PN2369 1 NSC<br>2N2218 3 PHIN<br>2N2222 3 SGSI<br>2N2368 3 PHIN<br>BC548A 3 PHIN<br>BFX89 3 PHIN<br>BSX20 3 PHIN | <b>2N2392</b><br>2N3250 1 MOTA<br>2N2905 3 PHIN<br>2N3905 3 NSC<br>DE159 3 DGE<br>GES3250 3 GESY<br>THC3250 3 SPR<br>TP3250 3 SPR   | <b>2N2411</b><br>BC178 1 PHIN<br>BC558 1 PHIN<br>BC478 3 SGSI<br>BC858A 3 PHIN<br>THBC178 3 SPR<br>THBC558 3 SPR  | <b>2N2449</b><br>2N652 1 LTE<br>DE126A 1 DGE<br>DE102 3 DGE | <b>2N2450</b><br>2N652 1 LTE<br>DE126A 1 DGE<br>DE102 3 DGE  |
| <b>2N2287</b><br>DE121 1 DGE   | <b>2N2319</b><br>2N3508 1 MOTA<br>2N3903 3 GESY<br>DE123A 3 DGE  | <b>2N2370</b><br>D40D2 3 GESY<br>D40D7 3 GESY<br>DE123AP 3 DGE<br>DE289A 3 DGE<br>MMBT2369 3 MOTA<br>THC3903 3 SPR<br>TMPT3903 3 SPR  | <b>2N2393</b><br>2N2905 1 MOTA<br>2N2905A 1 PHIN<br>DE129 3 DGE<br>THC2905 3 SPR<br>THC2905A 3 SPR<br>TN2905 3 NSC<br>TN2905A 3 NSC<br>TP2905 3 SPR<br>TP2905A 3 SPR        | <b>2N2412</b><br>BC558 1 PHIN<br>BSX29 1 SGSI<br>BC478 3 SGSI<br>BC858A 3 PHIN<br>THBC558 3 SPR   | <b>2N2451</b><br>DE126A 1 DGE                               | <b>2N2453</b><br>BCY87 1 PHIN<br>DE81 1 DGE<br>IT122 1 INL<br>MP311-78 1 MPS<br>IT121 3 INL<br>MP310 3 MPS |
| <b>2N2288</b><br>DE121 1 DGE<br>BDX92 3 PHIN   | <b>2N2330</b><br>2N2102 1 RCA<br>2N3903 1 GESY<br>DE123 1 DGE<br>2N2222 3 SGSI<br>2N2297 3 PHIN<br>2N4239 3 GSE<br>BC548A 3 PHIN<br>BCX56-6 3 SIEG<br>BCX56-10 3 SIEG<br>BFY55 3 PHIN<br>BSX61 3 PHIN<br>D40D1 3 GESY<br>D40D4C 3 SPR<br>D40D7 3 GESY<br>D40D10 3 GESY<br>DE123 3 DGE<br>DE123A 3 DGE<br>DE128 3 DGE<br>PN2221A 3 NSC<br>ST484 3 STI<br>THC1613 3 SPR<br>THC2102 3 SPR | <b>2N2371</b><br>BSX20 1 PHIN<br>PN2369A 1 NSC<br>BSX20 3 SGSI<br>D40D4 3 GESY<br>DE108 3 DGE<br>PN2369 3 NSC   | <b>2N2394</b><br>2N2904 1 PHIN<br>2N2905 1 MOTA<br>DE129 3 DGE<br>THC2904 3 SPR<br>THC2905 3 SPR<br>TN2904 3 NSC<br>TN2905 3 NSC<br>TP2904 3 SPR<br>TP2905 3 SPR            | <b>2N2415</b><br>DE160 1 DGE  | <b>2N2455</b><br>DE160 1 DGE                                | <b>2N2456</b><br>DE160 1 DGE   |
| <b>2N2289</b><br>BDX96 3 PHIN  | <b>2N2331</b><br>2N3903 1 GESY<br>DE123A 1 DGE<br>2N2222 3 SGSI<br>BC548A 3 PHIN<br>DE123AP 3 DGE<br>THC3903 3 SPR<br>TMPT3903 3 SPR   | <b>2N2372</b><br>DE102 1 DGE  | <b>2N2395</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2416</b><br>DE160 1 DGE  | <b>2N2457</b><br>DE160 1 DGE                                | <b>2N2458</b><br>DE160 1 DGE   |
| <b>2N2291</b><br>DE121 1 DGE   | <b>2N2332</b><br>DE159 1 DGE   | <b>2N2373</b><br>DE102 1 DGE  | <b>2N2396</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2417</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2459</b><br>DE160 1 DGE                                | <b>2N2460</b><br>DE160 1 DGE   |
| <b>2N2292</b><br>DE121 1 DGE   | <b>2N2333</b><br>2N4910 1 GSE<br>D44C4 1 GESY<br>2N3054 3 MOTA<br>2N3632 3 PHIN<br>2N6260 3 RCA<br>2N6290 3 RCA<br>2N6374 3 RCA<br>BD135 3 PHIN<br>BD239 3 RCA<br>BU407 3 APX<br>D44C5 3 GESY<br>DE175 3 DGE<br>ST44C4 3 STI   | <b>2N2374</b><br>DE102 1 DGE  | <b>2N2397</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2418</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2461</b><br>DE160 1 DGE                                | <b>2N2462</b><br>DE160 1 DGE   |
| <b>2N2293</b><br>DE121 1 DGE   | <b>2N2334</b><br>2N4910 1 GSE<br>D44C4 1 GESY<br>2N3054 3 MOTA<br>2N3632 3 PHIN<br>2N6260 3 RCA<br>2N6290 3 RCA<br>2N6374 3 RCA<br>BD135 3 PHIN<br>BD239 3 RCA<br>BU407 3 APX<br>D44C5 3 GESY<br>DE175 3 DGE<br>ST44C4 3 STI   | <b>2N2375</b><br>DE102 1 DGE  | <b>2N2398</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2419</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2463</b><br>DE160 1 DGE                                | <b>2N2464</b><br>DE160 1 DGE   |
| <b>2N2294</b><br>DE121 1 DGE   | <b>2N2335</b><br>2N4910 1 GSE<br>D44C4 1 GESY<br>2N3054 3 MOTA<br>2N3632 3 PHIN<br>2N6260 3 RCA<br>2N6290 3 RCA<br>2N6374 3 RCA<br>BD135 3 PHIN<br>BD239 3 RCA<br>BU407 3 APX<br>D44C5 3 GESY<br>DE175 3 DGE<br>ST44C4 3 STI   | <b>2N2376</b><br>DE102 1 DGE  | <b>2N2399</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2420</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2465</b><br>DE160 1 DGE                                | <b>2N2466</b><br>DE160 1 DGE   |
| <b>2N2297</b><br>2N1613 1 RCA<br>BFY56 1 SGSI<br>D40D4 1 GESY<br>2N699 3 RCA<br>2N1613 3 SGSI<br>2N2221 3 MOTA<br>2N4239 3 GSE<br>BCX56-6 3 SIEG<br>BCX56-10 3 SIEG<br>BFY55 3 PHIN<br>BSX61 3 PHIN<br>D40D1 3 GESY<br>D40D4C 3 SPR<br>D40D7 3 GESY<br>D40D10 3 GESY<br>DE123 3 DGE<br>DE123A 3 DGE<br>DE128 3 DGE<br>PN2221A 3 NSC<br>ST484 3 STI<br>THC1613 3 SPR<br>THC2102 3 SPR | <b>2N2336</b><br>2N4910 1 GSE<br>D44C4 1 GESY<br>2N3054 3 MOTA<br>2N3632 3 PHIN<br>2N6260 3 RCA<br>2N6290 3 RCA<br>2N6374 3 RCA<br>BD135 3 PHIN<br>BD239 3 RCA<br>BU407 3 APX<br>D44C5 3 GESY<br>DE175 3 DGE<br>ST44C4 3 STI   | <b>2N2377</b><br>DE102 1 DGE  | <b>2N2400</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2421</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2467</b><br>DE160 1 DGE                                | <b>2N2468</b><br>DE160 1 DGE   |
| <b>2N2297S</b><br>2N1613 1 RCA<br>D40D7 3 GESY<br>DE123 3 DGE<br>PN2221A 3 NSC<br>THC1613 3 SPR  | <b>2N2337</b><br>2N4910 1 GSE<br>D44C4 1 GESY<br>2N3054 3 MOTA<br>2N3632 3 PHIN<br>2N6260 3 RCA<br>2N6290 3 RCA<br>2N6374 3 RCA<br>BD135 3 PHIN<br>BD239 3 RCA<br>BU407 3 APX<br>D44C5 3 GESY<br>DE175 3 DGE<br>ST44C4 3 STI   | <b>2N2378</b><br>DE102 1 DGE  | <b>2N2401</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2422</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2469</b><br>DE160 1 DGE                                | <b>2N2470</b><br>DE160 1 DGE   |
| <b>2N2300</b><br>BFS23A 1 PHIN<br>SD1212-1 3 THCS  | <b>2N2338</b><br>2N4910 1 GSE<br>D44C4 1 GESY<br>2N3054 3 MOTA<br>2N3632 3 PHIN<br>2N6260 3 RCA<br>2N6290 3 RCA<br>2N6374 3 RCA<br>BD135 3 PHIN<br>BD239 3 RCA<br>BU407 3 APX<br>D44C5 3 GESY<br>DE175 3 DGE<br>ST44C4 3 STI   | <b>2N2379</b><br>DE102 1 DGE  | <b>2N2402</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2423</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2471</b><br>DE160 1 DGE                                | <b>2N2472</b><br>DE160 1 DGE   |
| <b>2N2304</b><br>2N4910 1 GSE<br>2N3054 3 MOTA<br>2N3632 3 PHIN<br>2N6260 3 RCA<br>2N6374 3 RCA<br>BD135 3 PHIN<br>D44C5 3 GESY<br>DE175 3 DGE   | <b>2N2339</b><br>2N4910 1 GSE<br>D44C4 1 GESY<br>2N3054 3 MOTA<br>2N3632 3 PHIN<br>2N6260 3 RCA<br>2N6290 3 RCA<br>2N6374 3 RCA<br>BD135 3 PHIN<br>BD239 3 RCA<br>BU407 3 APX<br>D44C5 3 GESY<br>DE175 3 DGE<br>ST44C4 3 STI   | <b>2N2380</b><br>DE128 1 DGE  | <b>2N2403</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2424</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2473</b><br>DE160 1 DGE                                | <b>2N2474</b><br>DE160 1 DGE   |
| <b>2N2308</b><br>2N4912 1 GSE<br>2N6212 3 RCA<br>2N6372 3 RCA<br>BD139 3 PHIN<br>D44C11 3 GESY<br>DE175 3 DGE  | <b>2N2340</b><br>2N4237 1 GSE<br>2N5786 3 RCA<br>D40D4 3 GESY<br>DE128 3 DGE   | <b>2N2381</b><br>DE126A 1 DGE   | <b>2N2404</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2425</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2475</b><br>DE160 1 DGE                                | <b>2N2476</b><br>DE160 1 DGE   |
| <b>2N2310</b><br>DE123A 1 DGE  | <b>2N2341</b><br>2N5334 1 GSE<br>2N5337 3 MOTA<br>2N5337 3 SGSI<br>BUY68 3 GESY<br>D42C7 3 GESY  | <b>2N2382</b><br>DE126A 1 DGE   | <b>2N2405</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2426</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2477</b><br>DE160 1 DGE                                | <b>2N2478</b><br>DE160 1 DGE   |
| <b>2N2312</b><br>2N3020 1 MOTA<br>2N1893 3 RCA<br>2N4305 3 TRWS<br>D38H4 3 GESY<br>DE128 3 DGE<br>THC3020 3 SPR<br>TN3020 3 NSC  | <b>2N2342</b><br>2N5334 1 GSE<br>2N5337 3 MOTA<br>BUY68 3 SGSI<br>D42C7 3 GESY   | <b>2N2383</b><br>DE126A 1 DGE   | <b>2N2406</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2427</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2479</b><br>DE160 1 DGE                                | <b>2N2480</b><br>DE160 1 DGE   |
| <b>2N2314</b><br>2N2221A 1 MOTA<br>BSS79B 3 SIEG<br>GES2221A 3 GESY<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR<br>TP2221A 3 SPR  | <b>2N2343</b><br>2N5334 1 GSE<br>2N5337 3 MOTA<br>BUY68 3 SGSI<br>D42C7 3 GESY   | <b>2N2384</b><br>DE126A 1 DGE   | <b>2N2407</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2428</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2481</b><br>DE160 1 DGE                                | <b>2N2482</b><br>DE160 1 DGE   |
| <b>2N2315</b><br>2N2221A 1 MOTA<br>2N2222 1 PHIN<br>BSS79B 3 SIEG<br>BSS81C 3 SIEG<br>GES2221A 3 GESY<br>GES2222 3 GESY<br>PN2222 3 NSC<br>THC2221A 3 SPR<br>THC2222 3 SPR<br>TMPT2221A 3 SPR<br>TMPT2222 3 SPR<br>TP2221A 3 SPR<br>TP2222 3 SPR   | <b>2N2344</b><br>2N5334 1 GSE<br>2N5337 3 MOTA<br>BUY68 3 SGSI<br>D42C7 3 GESY   | <b>2N2385</b><br>DE126A 1 DGE   | <b>2N2408</b><br>2N2219 1 MOTA<br>2N2221A 1 PHIN<br>BSS79B 3 SIEG<br>DE128 3 DGE<br>GES2219 3 GESY<br>GES2221A 3 GESY<br>THC2219 3 SPR<br>THC2221A 3 SPR<br>TMPT2221A 3 SPR | <b>2N2429</b><br>2N3250A 1 MOTA<br>GES3250A 3 GESY  | <b>2N2483</b><br>DE160 1 DGE                                | <b>2N2484</b><br>DE160 1 DGE   |