

11. SILICON NPN - HIGH POWER TRANSISTORS

IN ORDER OF (1) MIN. DERATING FACTOR
& (2) TYPE No.

| LINE No. | TYPE No. | 1 MIN. DERATE J to C (W/C) | MAX FREE AIR @ 25°C (W) | M T A X E M P | ABSOLUTE MAX. RATINGS @ 25°C | | | | | MAX. hFE | | | BIAS Vcb (V) | MIN | MAX | fae (Hz) | MAX. SAT. RES. (Ω) | tr (s) | STRUC-TURE | DWG # | L C O D E |
|----------|-------------|----------------------------|-------------------------|---------------|------------------------------|--------|-----------|------------|------------|----------------|---------|--------|--------------|-------|-------|----------|--------------------|--------|------------|-------|-----------|
| | | | | | Ic (A) | Ib (A) | VbVco (V) | VBeVce (V) | VbVceo (V) | lco @ 25°C (A) | Vcb (V) | Ic (A) | | | | | | | | | |
| 1 | DTS425# | 1.3 | 100 | J | 3.5 | 2.0 | 6.0 | 5.0 | 250uΔ | 5.0 | 1.0 | 30 | 90 | 2.5mΔ | 800m | | | | | | |
| 2 | DTS431M† | 1.3 | 125 | J | 3.5 | 2.0 | 4.00 | 5.0 | 2.5mΔ | 5.0 | 2.5 | 15 | 35 | 2.5mΔ | 280m | 800n | Δ | Y203 | CØ | | |
| 3 | DTS3704 | 1.3 | | J | 2.0 | 5.0 | 200 | 5.0 | 200 | 5.0 | 5.0 | 20 | 80 | 115k | 1.6 | | | Y204a | CØ | | |
| 4 | DTS3704A | 1.3 | | J | 2.0 | 5.0 | 300 | 5.0 | 300 | 5.0 | 5.0 | 20 | 80 | 115k | 1.6 | | | Y204a | CØ | | |
| 5 | DTS3704B | 1.3 | | J | 2.0 | 5.0 | 400 | 5.0 | 335 | 5.0 | 5.0 | 20 | 80 | 115k | 1.6 | | | Y204a | CØ | | |
| 6 | DTS3705 | 1.3 | | J | 3.5 | 5.0 | 200 | 5.0 | 200 | 5.0 | 5.0 | 25 | 75 | 110k | 80 | | | Y204a | CØ | | |
| 7 | DTS3705A | 1.3 | | J | 3.5 | 5.0 | 300 | 5.0 | 300 | 5.0 | 5.0 | 25 | 75 | 110k | 80 | | | Y204a | CØ | | |
| 8 | DTS3705B | 1.3 | | J | 3.5 | 5.0 | 400 | 5.0 | 400 | 5.0 | 5.0 | 25 | 75 | 110k | 80 | | | Y204a | CØ | | |
| 9 | DTS4065 | 1.3 | 100 | J | 1.5 | 4.0 | 20 | 20 | 250uΔ | 5.0 | 3.0 | 500 | | 8.0mΔ | | | | Y204a | CØ | | |
| 10 | HEPS7006-RT | 1.3 | 125 | J | 5.0 | 2.0 | 1.5k | 5.0 | 750 | 1.0m | 1.0 | 30 | 90 | 2.5mΔ | 800m | | | Y203 | CØ | | |
| 11 | MJ410 | 1.3 | | J | 5.0 | 2.0 | 200 | 5.0 | 200 | 250uΔ | 5.0 | 1.0 | 30 | 90 | 2.5mΔ | 800m | | | Y203 | CØ | |
| 12 | MJ411 | 1.3 | | J | 5.0 | 2.0 | 300 | 5.0 | 300 | 250uΔ | 5.0 | 1.0 | 30 | 90 | 2.5mΔ | 800m | | | Y203 | CØ | |
| 13 | MJ424 | 1.3 | | J | 5.0 | 2.0 | 700 | 6.0 | 350 | 250uΔ | 5.0 | 1.0 | 30 | 90 | 2.5mΔ | 800m | | | Y203 | CØ | |
| 14 | MJ425 | 1.3 | | J | 5.0 | 2.0 | 700 | 6.0 | 400 | 250uΔ | 5.0 | 1.0 | 30 | 90 | 2.5mΔ | 800m | | | Y203 | CØ | |
| 15 | SD1078 | 1.3 | 220 | J | 1.5 | | 65 | 4.0 | 36 | 2.0m | 5.0 | 5.0 | 10 | | | | | EPL | W52w | | |
| 16 | SDT402 | 1.3 | 100 | J | 3.5 | 2.0 | 200 | 5.0 | 400 | 0.5m | 5.0 | 1.0 | 30 | 90 | 2.0mΔ | 250n | PL | ME | Y203 | A | |
| 17 | SDT401 | 1.3 | 125 | J | 3.5 | 2.0 | 200 | 5.0 | 200 | 0.5m | 5.0 | 1.0 | 30 | 90 | 2.0mΔ | 250n | PL | ME | Y203 | A | |
| 18 | SDT411 | 1.3 | 100 | J | 3.5 | 2.0 | 300 | 5.0 | 300 | 0.5m | 5.0 | 1.0 | 30 | 90 | 2.0mΔ | 250n | PL | ME | Y203 | A | |
| 19 | SDT423† | 1.3 | 100 | J | 3.5 | 2.0 | 400 | 5.0 | 400 | 0.5 | 5.0 | 1.0 | 30 | 90 | 2.5mΔ | 3.8u | PL | ME | Y203 | A | |
| 20 | SDT424† | 1.3 | 100 | J | 3.5 | 2.0 | 700 | 6.0 | 500 | 0.5 | 5.0 | 1.0 | 30 | 90 | 2.5mΔ | 3.8u | PL | ME | Y203 | A | |
| 21 | SDT425† | 1.3 | 100 | J | 3.5 | 2.0 | 700 | 6.0 | 500 | 0.5 | 5.0 | 1.0 | 30 | 90 | 2.5mΔ | 3.8u | PL | ME | Y203 | A | |
| 22 | SDT430† | 1.3 | 125 | J | 3.0 | 2.0 | 400 | 5.0 | 400 | 2.5m | 5.0 | 2.5 | 15 | 45 | 2.5mΔ | 800n | PL | ME | Y203 | CØ | |
| 23 | SDT431† | 1.3 | 125 | J | 3.0 | 2.0 | 400 | 5.0 | 400 | 2.5m | 5.0 | 2.5 | 15 | 45 | 2.5mΔ | 800n | PL | ME | Y203 | CØ | |
| 24 | SDT431† | 1.3 | 250 | J | 3.0 | 1.5 | 180 | 7.0 | 2.0m | 4.0 | 8.0 | 15 | 45 | 2.5mΔ | 100m | 1.5u | PL | ME | Y203 | CØ | |
| 25 | SPC153.04 | 1.3 | 200 | J | 7.5 | 3.0 | 65 | 25 | 40 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 26 | SPC153.08 | 1.3 | 200 | J | 7.5 | 3.0 | 85 | 25 | 60 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 27 | SPC153.08 | 1.3 | 200 | J | 7.5 | 3.0 | 105 | 25 | 80 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 28 | SPC153.10 | 1.3 | 200 | J | 7.5 | 3.0 | 125 | 25 | 100 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 29 | SPC153.12 | 1.3 | 200 | J | 7.5 | 3.0 | 145 | 25 | 120 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 30 | SPC153.14 | 1.3 | 200 | J | 7.5 | 3.0 | 165 | 25 | 140 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 31 | SPC153.16 | 1.3 | 200 | J | 7.5 | 3.0 | 185 | 25 | 160 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 32 | SPC153.18 | 1.3 | 200 | J | 7.5 | 3.0 | 205 | 25 | 180 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 33 | SPC153.20 | 1.3 | 200 | J | 7.5 | 3.0 | 225 | 25 | 200 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 34 | SPC153.22 | 1.3 | 200 | J | 7.5 | 3.0 | 245 | 25 | 220 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 35 | SPC153.24 | 1.3 | 200 | J | 7.5 | 3.0 | 265 | 25 | 240 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 36 | SPC153.26 | 1.3 | 200 | J | 7.5 | 3.0 | 285 | 25 | 260 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 37 | SPC153.28 | 1.3 | 200 | J | 7.5 | 3.0 | 305 | 25 | 280 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 38 | SPC153.30 | 1.3 | 200 | J | 7.5 | 3.0 | 325 | 25 | 300 | 10m | 4.0 | 1.5 | 15 | | 866m | | D | | Y2061 | A | |
| 39 | SPC154.04 | 1.3 | 200 | J | 7.5 | 3.0 | 65 | 25 | 40 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 40 | SPC154.06 | 1.3 | 200 | J | 7.5 | 3.0 | 85 | 25 | 60 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 41 | SPC154.08 | 1.3 | 200 | J | 7.5 | 3.0 | 105 | 25 | 80 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 42 | SPC154.10 | 1.3 | 200 | J | 7.5 | 3.0 | 125 | 25 | 100 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 43 | SPC154.12 | 1.3 | 200 | J | 7.5 | 3.0 | 145 | 25 | 120 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 44 | SPC154.14 | 1.3 | 200 | J | 7.5 | 3.0 | 165 | 25 | 140 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 45 | SPC154.16 | 1.3 | 200 | J | 7.5 | 3.0 | 185 | 25 | 160 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 46 | SPC154.18 | 1.3 | 200 | J | 7.5 | 3.0 | 205 | 25 | 180 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 47 | SPC154.20 | 1.3 | 200 | J | 7.5 | 3.0 | 225 | 25 | 200 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 48 | SPC154.22 | 1.3 | 200 | J | 7.5 | 3.0 | 245 | 25 | 220 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 49 | SPC154.24 | 1.3 | 200 | J | 7.5 | 3.0 | 265 | 25 | 240 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 50 | SPC154.26 | 1.3 | 200 | J | 7.5 | 3.0 | 285 | 25 | 260 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 51 | SPC154.28 | 1.3 | 200 | J | 7.5 | 3.0 | 305 | 25 | 280 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 52 | SPC154.30 | 1.3 | 200 | J | 7.5 | 3.0 | 325 | 25 | 300 | 10m | 4.0 | 1.5 | 25 | | 833m | | D | | Y2061 | A | |
| 53 | SPC402 | 1.3 | 100 | J | 3.5 | 2.0 | 400 | 5.0 | 325 | 500uΔ | 5.0 | 500m | 20 | 100 | 4.0M | 666m | | D | | Y203 | CØ |
| 54 | SPC410 | 1.3 | 80 | J | 3.5 | 2.0 | 200 | 5.0 | 200 | 500u | 5.0 | 1.0 | 30 | 90 | 4.0M | 160m | | D | | Y203 | CØ |
| 55 | SPC411 | 1.3 | 100 | J | 3.5 | 2.0 | 300 | 5.0 | 300 | 500u | 5.0 | 1.0 | 30 | 90 | 5.0M | 800m | | D | | Y203 | CØ |
| 56 | SPC423 | 1.3 | 100 | J | 3.5 | 2.0 | 400 | 5.0 | 325 | 500 | 5.0 | 1.0 | 30 | 90 | 5.0M | 800m | | D | | Y203 | CØ |
| 57 | SPC424 | 1.3 | 100 | J | 3.5 | 2.0 | 500 | 6.0 | 350 | 250uΔ | 5.0 | 1.0 | 30 | 90 | 4.0M | 800m | | D | | Y203 | CØ |
| 58 | SPC425 | 1.3 | 100 | J | 3.5 | 2.0 | 500 | 6.0 | 400 | 250uΔ | 5.0 | 1.0 | 30 | 90 | 4.0M | 800m | | D | | Y203 | CØ |
| 59 | STS103 | 1.3 | 125 | J | 15 | 5.0 | 80 | 5.0 | 60 | 250uΔ | 1.5 | 5.0 | 20 | 55 | 4.0mΔ | 180m | 550n | EMΔ | | Y203 | CØ |
| 60 | STS104 | 1.3 | 125 | J | 15 | 5.0 | 80 | 5.0 | 60 | 250uΔ | 1.5 | 5.0 | 20 | 55 | 4.0mΔ | 150m | 550n | EMΔ | | Y203 | CØ |
| 61 | STS105 | 1.3 | 125 | J | 15 | 5.0 | 100 | 5.0 | 80 | 250uΔ | 1.5 | 5.0 | 20 | 55 | 4.0mΔ | 180m | 550n | EMΔ | | Y203 | CØ |
| 62 | STS106 | 1.3 | 125 | J | 15 | 5.0 | 110 | 5.0 | 90 | 250uΔ | 1.5 | 5.0 | 20 | 55 | 4.0mΔ | 180m | 550n | EMΔ | | Y203 | CØ |
| 63 | STS107 | 1.3 | 125 | J | 15 | 5.0 | 120 | 5.0 | 100 | 250uΔ | 1.5 | 5.0 | 20 | 55 | 4.0mΔ | 180m | 550n | EMΔ | | Y203 | CØ |
| 64 | STS402 | 1.3 | 100 | J | 3.5 | 2.0 | 400 | 5.0 | 400 | 500nΔ | 5.0 | 1.0 | 15 | | 4.0M | 667m | 1.9u | EMΔ | | Y203 | CØ |
| 65 | STS403 | 1.3 | 100 | J | 3.5 | 2.0 | 400 | 5.0 | 400 | 250uΔ | 5.0 | 1.0 | 15 | | 571m | 700n | EMΔ | | Y203 | CØ | |
| 66 | STS409 | 1.3 | 100 | J | 3.5 | 2.0 | 400 | 5.0 | 400 | 350uΔ | 5.0 | 1.0 | 15 | | 2.5m | 1.2 | EM | | Y203 | CØ | |
| 67 | STS410 | 1.3 | 80 | J | 3.5 | 2.0 | 200 | 5.0 | 200 | 500u | 5.0 | 1.0 | 30 | 90 | 4.0M | 800m | 300n | EMΔ | | Y203 | CØ |
| 68 | STS411 | 1.3 | 100 | J | 3.5 | 2.0 | 300 | 5.0 | 300 | 500u | 5.0 | 1.0 | 30 | 90 | 5.0M | 800m | 300n | EMΔ | | Y203 | CØ |
| 69 | STS423 | 1.3 | 100 | J | 3.5 | 2.0 | 400 | 5.0 | 400 | 500u | 5.0 | 1.0 | 30 | 90 | 5.0M | 800m | 300n | EMΔ | | Y203 | CØ |
| 70 | STS424 | 1.3 | 100 | J | 3.5 | 2.0 | 5.0 | 5.0 | 500 | 250uΔ | 5.0 | 1.0 | 30 | 90 | 4.0M | 300m | 300n | EMΔ | | Y203 | CØ |
| 71 | STS425 | 1.3 | 100 | J | 3.5 | 2.0 | 5.0 | 5.0 | 500 | 250uΔ | 5.0 | 1.0 | 30 | 90 | 4.0M | 300m | 300n | EMΔ | | Y203 | CØ |
| 72 | XGSR50020† | 1.3 | 100 | J | 5.0 | 10 | 250 | 8.0 | 200 | 500u | 2.0 | 20 | 15 | 50 | 30MΔ | 50m | 100n | DPL | | Y203 | CØ |
| 73 | 2N1015† | 1.4 | 150 | J | 7.5 | 5.0 | 25 | 30 | 20 | 20m | 4.0 | 2.0 | 10 | | 20k | 6.0u | | T1 | | Y203 | CØ |
| 74 | 2N1015A† | 1.4 | 150 | J | 7.5 | 5.0 | 25 | 60 | 20 | 20m | 4.0 | 2.0 | | | | | | | | | |