

Transistors

For complete package outlines, refer to pages PO-1 through PO-6

General Purpose and Switching

| Type | | Maximum Ratings | | | Characteristics ($T_A=25^\circ\text{C}$) | | | | | | | | Case | | | |
|----------------|---|-----------------|-------|-------|--|--------------|-----------|-------------|-------|----------|------------------|-------|-------|--------|-----------|------------|
| N=NPN P=PNP | | V_{CBO} | I_C | P_t | f_T | I_{CBO} at | V_{CBO} | h_{FE} at | I_C | V_{CE} | $V_{CE(sat)}$ at | I_C | I_B | Style | Lead Code | SOT Equiv. |
| | | V | mA | mW | | I_{CEX} at | V | | | | V | | | | | |
| BC167 | N | 50 | 100 | 500 | 200 | ≤ 15 | 30 | 110....450* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92c | 58 | BC547 |
| BC168 | N | 30 | 100 | 500 | 200 | ≤ 15 | 30 | 110....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92c | 58 | BC848 |
| BC169 | N | 30 | 100 | 500 | 200 | ≤ 15 | 30 | 200....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92c | 58 | BC849 |
| BC182 | N | 60 | 100 | 500 | 200 | ≤ 15 | 50 | 110....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BCX70 |
| BC183 | N | 45 | 100 | 500 | 200 | ≤ 15 | 50 | 110....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BCW60 |
| BC212 | P | 60 | 100 | 500 | 250 | ≤ 15 | 30 | 125....800* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC857 |
| BC213 | P | 45 | 100 | 500 | 250 | ≤ 15 | 30 | 125....800* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC858 |
| BC237 | N | 50 | 100 | 500 | 200 | ≤ 15 | 50 | 110....450* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BC847 |
| BC238 | N | 30 | 100 | 500 | 200 | ≤ 15 | 30 | 110....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BC848 |
| BC239 | N | 30 | 100 | 500 | 200 | ≤ 15 | 30 | 110....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BC849 |
| BC257 | P | 50 | 100 | 500 | 250 | ≤ 15 | 30 | 125....475* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92c | 59 | BCX71 |
| BC258 | P | 30 | 100 | 500 | 250 | ≤ 15 | 30 | 125....800* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92c | 59 | BCW61 |
| BC259 | P | 25 | 100 | 500 | 250 | ≤ 15 | 30 | 220....800* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92c | 59 | BCW61 |
| BC307 | P | 50 | 100 | 500 | 250 | ≤ 15 | 50 | 125....475* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC857 |
| BC308 | P | 30 | 100 | 500 | 250 | ≤ 15 | 30 | 125....800* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC858 |
| BC309 | P | 25 | 100 | 500 | 250 | ≤ 15 | 25 | 125....800* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC859 |
| BC327 | P | 50 | 800 | 625 | 200 | ≤ 100 | 45 | 100....630* | 100 | 1 | ≤ 0.70 | 500 | 50.0 | TO-92d | 51 | BC807 |
| BC328 | P | 30 | 800 | 625 | 200 | ≤ 100 | 25 | 100....630* | 100 | 1 | ≤ 0.70 | 500 | 50.0 | TO-92d | 51 | BC808 |
| BC337 | N | 50 | 800 | 625 | 170 | ≤ 100 | 45 | 100....630* | 100 | 1 | ≤ 0.70 | 500 | 50.0 | TO-92d | 53 | BC817 |
| BC338 | N | 30 | 800 | 625 | 170 | ≤ 100 | 25 | 100....630* | 100 | 1 | ≤ 0.70 | 500 | 50.0 | TO-92d | 53 | BC818 |
| BC368 | N | 25 | 1000 | 800 | 100 | ≤ 100 | 25 | 63....400 | 500 | 1 | ≤ 0.50 | 1000 | 100.0 | TO-92d | 58 | BCP68 |
| BC369 | P | 25 | 1000 | 800 | 100 | ≤ 100 | 25 | 63....400 | 500 | 1 | ≤ 0.50 | 1000 | 100.0 | TO-92d | 59 | BCP69 |
| BC413 | N | 45 | 100 | 500 | 200 | ≤ 15 | 30 | 200....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BC850 |
| BC414 | N | 50 | 100 | 500 | 200 | ≤ 15 | 30 | 200....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BC850 |
| BC415 | P | 45 | 100 | 500 | 250 | ≤ 15 | 30 | 125....800* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC860 |
| BC416 | P | 50 | 100 | 500 | 250 | ≤ 15 | 30 | 125....800* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC860 |
| BC546 | N | 80 | 100 | 500 | 200 | ≤ 15 | 30 | 100....450* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BC846 |
| BC547 | N | 50 | 100 | 500 | 200 | ≤ 15 | 30 | 110....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BC847 |
| BC548 | N | 30 | 100 | 500 | 200 | ≤ 15 | 30 | 110....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BC848 |
| BC549 | N | 30 | 100 | 500 | 200 | ≤ 15 | 30 | 200....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BC849 |
| BC550 | N | 50 | 100 | 500 | 200 | ≤ 15 | 30 | 200....800* | 2 | 5 | ≤ 0.60 | 100 | 5.0 | TO-92d | 53 | BC850 |
| BC556 | P | 80 | 100 | 500 | 250 | ≤ 15 | 30 | 125....475* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC856 |
| BC557 | P | 50 | 100 | 500 | 250 | ≤ 15 | 30 | 125....800* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC857 |
| BC558 | P | 30 | 100 | 500 | 250 | ≤ 15 | 30 | 125....800* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC858 |
| BC559 | P | 30 | 100 | 500 | 250 | ≤ 15 | 30 | 220....800* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC859 |
| BC560 | P | 50 | 100 | 500 | 250 | ≤ 15 | 30 | 220....475* | 2 | 5 | ≤ 0.65 | 100 | 5.0 | TO-92d | 51 | BC860 |
| BC635 | N | 45 | 1000 | 800 | 100 | ≤ 100 | 30 | 40....250 | 150 | 2 | ≤ 0.50 | 500 | 50.0 | TO-92d | 58 | BCP54 |
| BC636 | P | 45 | 1000 | 800 | 100 | ≤ 100 | 30 | 40....250 | 150 | 2 | ≤ 0.50 | 500 | 50.0 | TO-92d | 59 | BCP55 |
| BC637 | N | 60 | 1000 | 800 | 100 | ≤ 100 | 30 | 40....160 | 150 | 2 | ≤ 0.50 | 500 | 50.0 | TO-92d | 58 | BCP56 |
| BC638 | P | 60 | 1000 | 800 | 100 | ≤ 100 | 30 | 40....160 | 150 | 2 | ≤ 0.50 | 500 | 50.0 | TO-92d | 59 | BCP51 |
| BC639 | N | 100 | 1000 | 800 | 100 | ≤ 100 | 30 | 40....160 | 150 | 2 | ≤ 0.50 | 500 | 50.0 | TO-92d | 58 | BCP52 |
| BC640 | P | 100 | 1000 | 800 | 100 | ≤ 100 | 30 | 40....160 | 150 | 2 | ≤ 0.50 | 500 | 50.0 | TO-92d | 59 | BCP53 |
| BCX58 | N | 32 | 100 | 500 | 200 | ≤ 20 | 32 | 120....630* | 2 | 5 | ≤ 0.50 | 100 | 2.5 | TO-92d | 53 | BCW60 |
| BCX59 | N | 45 | 100 | 500 | 200 | ≤ 20 | 45 | 120....630* | 2 | 5 | ≤ 0.50 | 100 | 2.5 | TO-92d | 53 | BCX70 |
| BCX73 | N | 60 | 800 | 625 | 170 | ≤ 20 | 32 | 100....630* | 100 | 1 | ≤ 0.60 | 500 | 50.0 | TO-92d | 53 | BCW65 |
| BCX74 | N | 75 | 800 | 625 | 170 | ≤ 20 | 45 | 100....630* | 100 | 1 | ≤ 0.60 | 500 | 50.0 | TO-92d | 53 | BCW66 |
| BCX75 | P | 60 | 800 | 625 | 200 | ≤ 20 | 32 | 100....630* | 100 | 1 | ≤ 0.60 | 500 | 50.0 | TO-92d | 53 | BCW67 |
| BCX76 | P | 75 | 800 | 625 | 200 | ≤ 20 | 45 | 100....630* | 100 | 1 | ≤ 0.60 | 500 | 50.0 | TO-92d | 51 | BCW68 |
| BCX78 | P | 32 | 100 | 500 | 250 | ≤ 20 | 32 | 120....630* | 2 | 5 | ≤ 0.60 | 100 | 2.5 | TO-92d | 51 | BCW61 |
| BCX79 | P | 45 | 100 | 500 | 250 | ≤ 20 | 45 | 120....630* | 2 | 5 | ≤ 0.60 | 100 | 2.5 | TO-92d | 51 | BCX71 |

* Available in h_{FE} subgroups. See foldout for description.