



# Pro-Electron Series

| Type No. | Case Style    | V <sub>CB0</sub><br>(V)<br>Min | V <sub>CEO</sub><br>(V)<br>Min | V <sub>EBO</sub><br>(V)<br>Min | I <sub>CB0</sub><br>(nA)<br>Max | V <sub>CB</sub><br>(V)<br>@ | h <sub>FE</sub><br>(1kHz)*<br>Min | h <sub>FE</sub><br>(1kHz)*<br>Max | I <sub>C</sub><br>(mA)<br>@ | V <sub>CE</sub><br>(V)<br>& | V <sub>CE(sat)</sub><br>(V)<br>Max | V <sub>CE(sat)</sub><br>(V)<br>&<br>Min | V <sub>BE(sat)</sub><br>(V)<br>Max | V <sub>BE(sat)</sub><br>(V)<br>Max | I <sub>C</sub><br>(mA)<br>@ | C <sub>ob</sub><br>(pF)<br>Max | f <sub>T</sub><br>(MHz)<br>Min | f <sub>T</sub><br>(MHz)<br>Max | I <sub>C</sub><br>(mA)<br>@ | t <sub>off</sub><br>(ns)<br>Max | NF<br>(dB)<br>Max | Test Condition | Process No. |
|----------|---------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------|-----------------------------------|-----------------------------------|-----------------------------|-----------------------------|------------------------------------|-----------------------------------------|------------------------------------|------------------------------------|-----------------------------|--------------------------------|--------------------------------|--------------------------------|-----------------------------|---------------------------------|-------------------|----------------|-------------|
| BC214K   | TO-106        | 45                             | 30                             | 5                              | 15                              | 30                          | 100<br>140<br>120                 | 400<br>2<br>100                   | 0.01<br>5<br>5              | 0.25<br>0.6                 | 0.6                                | 0.6                                     | 0.72*<br>10<br>100                 | 2<br>10<br>100                     | 10                          | 10                             | 200                            |                                | 10                          |                                 | 2                 | 2              | 63          |
| BC214KA  | TO-106        | 45                             | 30                             | 5                              | 15                              | 30                          | 100<br>140<br>120<br>100          | 400<br>2<br>100<br>300*           | 0.01<br>5<br>5<br>5         | 0.25<br>0.6                 | 0.6                                | 0.6                                     | 0.72*<br>10<br>100                 | 2<br>10<br>100                     | 10                          | 10                             | 200                            |                                | 10                          | 10                              | 2                 | 2              | 63          |
| BC214KB  | TO-106        | 45                             | 30                             | 5                              | 15                              | 30                          | 100<br>200<br>120                 | 400<br>2<br>100                   | 0.01<br>5<br>5              | 0.25<br>0.6                 | 0.6                                | 0.6                                     | 0.72*<br>10<br>100                 | 2<br>10<br>100                     | 10                          | 10                             | 200                            |                                | 10                          | 10                              | 2                 | 2              | 63          |
| BC214KC  | TO-106        | 45                             | 30                             | 5                              | 15                              | 30                          | 100<br>350<br>120                 | 400<br>2<br>100                   | 0.01<br>5<br>5              | 0.25<br>0.6                 | 0.6                                | 0.6                                     | 0.72*<br>10<br>100                 | 2<br>10<br>100                     | 10                          | 10                             | 200                            |                                | 10                          | 10                              | 2                 | 2              | 63          |
| BC214L   | TO-92<br>(74) | 45                             | 30                             | 5                              | 15                              | 30                          | 100<br>140<br>120                 | 400<br>2<br>100                   | 0.01<br>5<br>5              | 0.25<br>0.6                 | 0.6                                | 0.6                                     | 1.1<br>100<br>2                    | 10<br>100<br>2                     | 10                          | 10                             | 200                            |                                | 10                          | 10                              | 2                 | 2              | 63          |
| BC214LB  | TO-92<br>(74) | 45                             | 30                             | 5                              | 15                              | 30                          | 200                               | 400*                              | 2                           | 5                           | 0.25<br>0.6                        | 0.6                                     | 1.1<br>0.72*<br>2                  | 10<br>100<br>2                     | 10                          | 10                             | 200                            |                                | 10                          | 10                              | 2                 | 2              | 63          |
| BC214LC  | TO-92<br>(74) | 45                             | 30                             | 5                              | 15                              | 30                          | 350                               | 600*                              | 2                           | 5                           | 0.25<br>0.6                        | 0.6                                     | 1.1<br>0.72*<br>2                  | 10<br>100<br>2                     | 10                          | 10                             | 200                            |                                | 10                          | 10                              | 2                 | 2              | 63          |
| BC237    | TO-106        | 50                             | 45                             | 6                              | 50                              | 20                          | 125                               | 500*                              | 2                           | 5                           | 0.25<br>0.6                        | 0.6                                     | 0.77*<br>10<br>100                 | 10<br>100                          | 4.5                         | 4.5                            |                                |                                |                             | 10                              | 1                 | 04             |             |
| BC237A   | TO-106        | 50                             | 45                             | 6                              | 50                              | 20                          | 125                               | 260*                              | 2                           | 5                           | 0.25<br>0.6                        | 0.6                                     | 0.77*<br>10<br>100                 | 10<br>100                          | 4.5                         | 4.5                            |                                |                                |                             | 10                              | 1                 | 04             |             |
| BC237B   | TO-106        | 50                             | 45                             | 6                              | 50                              | 20                          | 240                               | 500*                              | 2                           | 5                           | 0.25<br>0.6                        | 0.6                                     | 0.77*<br>10<br>100                 | 10<br>100                          | 4.5                         | 4.5                            |                                |                                |                             | 10                              | 1                 | 04             |             |
| BC238    | TO-106        | 30                             | 20                             | 5                              | 50                              | 20                          | 125                               | 900*                              | 2                           | 5                           | 0.25<br>0.6                        | 0.6                                     | 0.77*<br>10<br>100                 | 10<br>100                          | 4.5                         | 4.5                            |                                |                                |                             | 10                              | 1                 | 04             |             |
| BC238A   | TO-106        | 30                             | 20                             | 5                              | 50                              | 20                          | 125                               | 260*                              | 2                           | 5                           | 0.25<br>0.6                        | 0.6                                     | 0.77*<br>10<br>100                 | 10<br>100                          | 4.5                         | 4.5                            |                                |                                |                             | 10                              | 1                 | 04             |             |
| BC238B   | TO-106        | 30                             | 20                             | 5                              | 50                              | 20                          | 240                               | 500*                              | 2                           | 5                           | 0.25<br>0.6                        | 0.6                                     | 0.77*<br>10<br>100                 | 10<br>100                          | 4.5                         | 4.5                            |                                |                                |                             | 10                              | 1                 | 04             |             |
| BC238C   | TO-106        | 30                             | 20                             | 5                              | 50                              | 20                          | 450                               | 900*                              | 2                           | 5                           | 0.25<br>0.6                        | 0.6                                     | 0.77*<br>10<br>100                 | 10<br>100                          | 4.5                         | 4.5                            |                                |                                |                             | 10                              | 1                 | 04             |             |
| BC239    | TO-106        | 30                             | 20                             | 5                              | 50                              | 20                          | 240                               | 900*                              | 2                           | 5                           | 0.25                               | 0.6                                     | 0.7*<br>2                          | 10<br>2                            | 4.5                         | 4.5                            |                                |                                |                             | 4<br>4                          | 1<br>2            | 04             |             |
| BC239B   | TO-106        | 30                             | 20                             | 5                              | 50                              | 20                          | 240                               | 500*                              | 2                           | 5                           | 0.25                               | 0.6                                     | 0.7*<br>2                          | 10<br>2                            | 4.5                         | 4.5                            |                                |                                |                             | 4<br>4                          | 1<br>2            | 04             |             |
| BC239C   | TO-106        | 30                             | 20                             | 5                              | 50                              | 20                          | 450                               | 900*                              | 2                           | 5                           | 0.25                               | 0.6                                     | 0.7*<br>2                          | 10<br>2                            | 4.5                         | 4.5                            |                                |                                |                             | 4<br>4                          | 1<br>2            | 27             |             |
| BC251A   | TO-106        |                                | 45                             | 5                              | 50                              | 45                          | 125                               | 260*                              | 2                           | 5                           | 0.25<br>0.6                        | 0.6                                     | 0.9<br>10<br>100                   | 10<br>100                          |                             |                                |                                |                                |                             |                                 | 6                 | 1              | 71          |