

# TO-92 Plastic Package Transistors (PNP)

| Maximum Ratings |                      |                      |                      |                    |                    | Electrical Characteristics (Ta=25°C, Unless Otherwise Specified) |                     |                       |                     |                   |     |                     |                     |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |
|-----------------|----------------------|----------------------|----------------------|--------------------|--------------------|--|---------------------|-----------------------|---------------------|-------------------|-----|---------------------|---------------------|--------------------------|-----|--------------------------|---------------------|----------------------|-----|----------------------|-----|-----|----------------------|---------------------|--------------|----------------------|-----------------|
| Type No.        | V <sub>CBO</sub> (V) | V <sub>CEO</sub> (V) | V <sub>EBO</sub> (V) | P <sub>D</sub> (W) | I <sub>C</sub> (A) | I <sub>CBO</sub> (μA)  | V <sub>CB</sub> (V) | I <sub>CES</sub> (μA) | V <sub>CE</sub> (V) | h <sub>FE</sub> @ |     | I <sub>C</sub> (mA) | V <sub>CE</sub> (V) | V <sub>CE(SAT)</sub> (V) |     | V <sub>BE(SAT)</sub> (V) | I <sub>C</sub> (mA) | C <sub>ob</sub> (pF) |     | f <sub>t</sub> (MHz) |     |     | t <sub>on</sub> (ns) | N <sub>F</sub> (dB) | @ Freq (MHz) | C <sub>re</sub> (pF) | CDIL Case Style |
|                 | Min                  | Min                  | Min                  | @ Tc=25°C          | Min                |  |                     |                       |                     | Max               | Max |                     |                     | Max                      | Max |                          |                     | Max                  | Max | Max                  | Max | Max |                      |                     |              |                      |                 |
| BC258C          | 30                   | 25                   | 5                    | 0.3                | 0.1                |  |                     | 0.1                   | 20                  | 380               | 800 | 2                   | 5                   | 0.2                      | 0.6 | 0.8                      | 10                  | 6                    |     | 130                  | 10  |     | 10                   |                     |              | TO-92-1              |                 |
| BC259           | 30                   | 25                   | 5                    | 0.3                | 0.05               |  |                     | 0.1                   | 20                  | 180               | 800 | 2                   | 5                   | 0.2                      |     | 0.8                      | 10                  | 6                    |     | 130                  | 10  |     | 4                    |                     |              | TO-92-1              |                 |
| BC259B          | 30                   | 25                   | 5                    | 0.3                | 0.05               |  |                     | 0.1                   | 20                  | 180               | 460 | 2                   | 5                   | 0.2                      |     | 0.8                      | 10                  | 6                    |     | 130                  | 10  |     | 4                    |                     |              | TO-92-1              |                 |
| BC259C          | 30                   | 25                   | 5                    | 0.3                | 0.05               |  |                     | 0.1                   | 20                  | 380               | 800 | 2                   | 5                   | 0.2                      |     | 0.8                      | 10                  | 6                    |     | 130                  | 10  |     | 4                    |                     |              | TO-92-1              |                 |
| BC307           | 50                   | 45                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 45                  | 120               | 800 | 2                   | 5                   | 0.3                      |     |                          | 10                  | 6                    |     | 280                  | 10  |     | 10                   |                     |              | TO-92-4              |                 |
| BC307A          | 50                   | 45                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 50                  | 120               | 220 | 2                   | 5                   | 0.3                      |     |                          | 10                  | 6                    |     | 280                  | 10  |     | 10                   |                     |              | TO-92-4              |                 |
| BC307B          | 50                   | 45                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 50                  | 200               | 460 | 2                   | 5                   | 0.3                      |     |                          | 10                  | 6                    |     | 280                  | 10  |     | 10                   | 0.001               |              | TO-92-4              |                 |
| BC307C          | 50                   | 45                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 50                  | 420               | 800 | 2                   | 5                   | 0.3                      |     |                          | 10                  | 6                    |     | 280                  | 10  |     | 10                   |                     |              | TO-92-4              |                 |
| BC308           | 30                   | 25                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 30                  | 120               | 800 | 2                   | 5                   | 0.3                      |     | 2                        |                     | 6                    |     | 320                  | 10  |     | 10                   |                     |              | TO-92-4              |                 |
| BC308A          | 30                   | 25                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 30                  | 120               | 220 | 2                   | 5                   | 0.3                      |     |                          | 10                  | 6                    |     | 320                  | 10  |     | 10                   |                     |              | TO-92-4              |                 |
| BC308B          | 30                   | 25                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 30                  | 200               | 460 | 2                   | 5                   | 0.3                      |     |                          | 10                  | 6                    |     | 320                  | 10  |     | 10                   | 0.001               |              | TO-92-4              |                 |
| BC308C          | 30                   | 25                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 30                  | 420               | 800 | 2                   | 5                   | 0.3                      |     |                          | 10                  | 6                    |     | 320                  | 10  |     | 10                   |                     |              | TO-92-4              |                 |
| BC309           | 30                   | 25                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 30                  | 120               | 800 | 2                   | 5                   | 0.3                      |     |                          | 10                  | 6                    |     | 360                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
| BC309A          | 30                   | 25                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 30                  | 120               | 800 | 2                   | 5                   | 0.3                      |     |                          | 10                  | 6                    |     | 360                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
| BC309B          | 30                   | 25                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 30                  | 200               | 460 | 2                   | 5                   | 0.3                      |     |                          | 10                  | 6                    |     | 360                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
| BC309C          | 30                   | 25                   | 5                    | 0.35               | 0.1                |  |                     | 0.015                 | 30                  | 420               | 800 | 2                   | 5                   | 0.3                      |     |                          | 10                  | 6                    |     | 360                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
| BC327           | 50                   | 45                   | 5                    | 0.625              | 0.8                | 0.1  | 20                  |                       |                     | 40                | 300 | 1                   | 1                   | 0.7                      |     | 500                      | 8                   | 4                    |     | 100                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
|                 |                      |                      |                      |                    |                    |  |                     |                       |                     | 100               | 630 | 100                 | 1                   |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |
| BC327-10        | 50                   | 45                   | 5                    | 0.625              | 0.8                | 0.1  | 20                  |                       |                     | 40                | 300 | 1                   | 1                   | 0.7                      |     | 500                      | 8                   |                      |     | 100                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
|                 |                      |                      |                      |                    |                    |  |                     |                       |                     | 63                | 160 | 100                 | 1                   |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |
| BC327-16        | 50                   | 45                   | 5                    | 0.625              | 0.8                | 0.1  | 20                  |                       |                     | 40                | 300 | 1                   | 1                   | 0.7                      |     | 500                      | 8                   |                      |     | 100                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
|                 |                      |                      |                      |                    |                    |  |                     |                       |                     | 100               | 250 | 100                 | 1                   |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |
| BC327-25        | 50                   | 45                   | 5                    | 0.625              | 0.8                | 0.1  | 20                  |                       |                     | 40                | 300 | 1                   | 1                   | 0.7                      |     | 500                      | 8                   |                      |     | 100                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
|                 |                      |                      |                      |                    |                    |  |                     |                       |                     | 160               | 400 | 100                 | 1                   |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |
| BC327-40        | 50                   | 45                   | 5                    | 0.625              | 0.8                | 0.1  | 20                  |                       |                     | 250               | 600 | 100                 | 1                   | 0.7                      |     | 500                      | 8                   |                      |     | 100                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
|                 |                      |                      |                      |                    |                    |  |                     |                       |                     | 40                | 300 | 1                   | 1                   |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |
| BC327A          | 60                   | 60                   | 5                    | 0.625              | 0.8                | 0.1  | 20                  |                       |                     | 100               | 400 | 100                 | 1                   | 0.7                      |     | 500                      |                     |                      |     | 100                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
|                 |                      |                      |                      |                    |                    |  |                     |                       |                     | 40                | 300 | 1                   | 1                   |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |
| BC328           | 30                   | 25                   | 5                    | 0.625              | 0.8                | 0.1  | 20                  |                       |                     | 40                | 300 | 1                   | 1                   | 0.7                      |     | 500                      | 8                   | 4                    |     | 100                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
|                 |                      |                      |                      |                    |                    |  |                     |                       |                     | 100               | 630 | 100                 | 1                   |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |
| BC328-10        | 30                   | 25                   | 5                    | 0.625              | 0.8                | 0.1  | 20                  |                       |                     | 40                | 300 | 1                   | 1                   | 0.7                      |     | 500                      | 8                   | 4                    |     | 100                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
|                 |                      |                      |                      |                    |                    |  |                     |                       |                     | 63                | 160 | 100                 | 1                   |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |
| BC328-16        | 30                   | 25                   | 5                    | 0.625              | 0.8                | 0.1  | 20                  |                       |                     | 40                | 300 | 1                   | 1                   | 0.7                      |     | 500                      | 8                   |                      |     | 100                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
|                 |                      |                      |                      |                    |                    |  |                     |                       |                     | 100               | 250 | 100                 | 1                   |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |
| BC328-25        | 30                   | 25                   | 5                    | 0.625              | 0.8                | 0.1  | 20                  |                       |                     | 40                | 300 | 1                   | 1                   | 0.7                      |     | 500                      | 8                   |                      |     | 100                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
|                 |                      |                      |                      |                    |                    |  |                     |                       |                     | 160               | 400 | 100                 | 1                   |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |
| BC328-40        | 30                   | 25                   | 5                    | 0.625              | 0.8                | 0.1  | 20                  |                       |                     | 40                | 300 | 1                   | 1                   | 0.7                      |     | 500                      | 8                   |                      |     | 100                  | 10  |     | 4                    |                     |              | TO-92-4              |                 |
|                 |                      |                      |                      |                    |                    |  |                     |                       |                     | 250               | 630 | 100                 | 1                   |                          |     |                          |                     |                      |     |                      |     |     |                      |                     |              |                      |                 |