

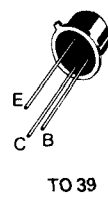
# general purpose, amplification, switching - metal case

commutation, amplification, usage général

boîtier métal



| Type   |                  | Maximum ratings          |                         | Characteristics at 25°C           |         |  |      |                         |                          |                                |                          | Case |
|--|------------------|--------------------------|-------------------------|-----------------------------------|---------|--|------|-------------------------|--------------------------|--------------------------------|--------------------------|------|
| NPN  | PNP              | P <sub>tot</sub><br>(mW) | V <sub>CEO</sub><br>(V) | h <sub>21E</sub> / I <sub>C</sub> |         | V <sub>CE (sat)</sub> / I <sub>C</sub> /I <sub>B</sub> |      | f <sub>T</sub><br>(MHz) | C <sub>22b</sub><br>(nF) | F <sub>B</sub><br>1KHz<br>(dB) | t <sub>off</sub><br>(ns) |      |
|  |                  |                          |                         | min                               | max     | max  | max  |                         |                          |                                |                          |      |
| BC 140   | BC 160<br>BC 161 | 800                      | 40                      | 40                                | 250 (1) | 100  | 1    | 1000/100                | 50                       | 25                             |                          | 850  |
| BC 141   |                  | 800                      | 60                      | 40                                | 250 (1) | 100  | 1    | 1000/100                | 50                       | 25                             |                          | 850  |
| BC 211<br>BC 211 A                                       |                  | 800                      | 40                      | 40                                | 250 (1) | 100  | 1    | 1000/100                | 50                       | 30                             |                          | 650  |
|  |                  | 800                      | 60                      | 40                                | 250 (1) | 100  | 1    | 1000/100                | 50                       | 30                             |                          | 650  |
| BC 301<br>BC 302   | BC 303<br>BC 304 | 800                      | 40                      | 40                                | 250 (1) | 150  | 1    | 1000/100                | 50                       | 25                             |                          | 850  |
|  |                  | 800                      | 60                      | 40                                | 250 (1) | 150  | 1    | 1000/100                | 50                       | 25                             |                          | 850  |
|  |                  | 800                      | 40                      | 40                                | 250 (1) | 150  | 1    | 1000/100                | 50                       | 30                             |                          | 650  |
|  |                  | 800                      | 60                      | 40                                | 250 (1) | 150  | 1    | 1000/100                | 50                       | 30                             |                          | 650  |
| BFY 50<br>BFY 51<br>BFY 52<br>BFY 56 A                   |                  | 850                      | 60                      | 40                                | 240     | 150  | 0,5  | 150/ 15                 |                          |                                |                          |      |
|  |                  | 850                      | 45                      | 40                                | 240     | 150  | 0,5  | 150/ 15                 |                          |                                |                          |      |
|  |                  | 850                      | 60                      | 40                                | 240     | 150  | 0,65 | 150/ 15                 |                          |                                |                          |      |
|  |                  | 850                      | 45                      | 40                                | 240     | 150  | 0,65 | 150/ 15                 |                          |                                |                          |      |
| BSX 45<br>BSX 46   | BSV 15<br>BSV 16 | 800                      | 35                      | 30                                |         | 150  | 0,2  | 150/ 15                 | 60                       | 12                             |                          | 360  |
|  |                  | 800                      | 30                      | 40                                |         | 150  | 0,35 | 150/ 15                 | 50                       | 12                             |                          | 360  |
|  |                  | 800                      | 20                      | 60                                |         | 150  | 0,35 | 150/ 15                 | 50                       | 12                             |                          | 360  |
|  |                  | 800                      | 55                      | 40                                | 120     | 150  | 1    | 1000/100                | 60                       | 25                             |                          | 800  |
| BSY 51<br>BSY 52<br>BSY 53<br>BSY 54<br>BSY 55<br>BSY 56 |                  | 5000 (2)                 | 40                      | 40                                | 250 (1) | 100  | 1    | 1000/100                | 50                       | 25                             | 3,55                     | 850  |
|  |                  | 5000 (3)                 | 60                      | 40                                | 250 (1) | 100  | 1    | 1000/100                | 50                       | 20                             | 3,55                     | 850  |
| BUY 49 S   |                  | 3200 (4)                 | 40                      | 40                                | 250 (1) | 100  | 1    | 500/ 25                 | 50                       | 30                             |                          | 650  |
|  |                  | 3200 (5)                 | 60                      | 40                                | 250 (1) | 100  | 1    | 500/ 25                 | 50                       | 30                             |                          | 650  |
|  |                  | 800                      | 25                      | 40                                | 120     | 150  | 0,8  | 150/ 15                 |                          | 10                             |                          |      |
|  |                  | 800                      | 25                      | 100                               | 300     | 150  | 0,8  | 150/ 15                 |                          | 10                             |                          |      |
|  |                  | 800                      | 30                      | 40                                | 120     | 150  | 0,6  | 150/ 15                 |                          | 10                             |                          |      |
|  |                  | 800                      | 30                      | 100                               | 300     | 150  | 0,6  | 150/ 15                 |                          | 10                             |                          |      |
|  |                  | 800                      | 80                      | 40                                | 120     | 150  | 0,6  | 150/ 15                 |                          | 10                             |                          |      |
|  |                  | 800                      | 80                      | 100                               | 300     | 150  | 0,6  | 150/ 15                 |                          | 10                             |                          |      |
| BSY 82   |                  | 900                      | 18                      | 100                               | 300     | 150  | 0,25 | 150/ 15                 |                          | 15                             |                          |      |
| BUY 49 S   |                  | 1000                     | 200                     | 40                                |         | 500  | 1,1  | 500/ 50                 | 50                       | 35                             |                          | 1300 |

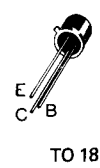


§ : Typical value / Valeur typique (1) : Several h<sub>21</sub> groups available / Plusieurs groupes h<sub>21</sub> disponibles (2) T<sub>case</sub> = 25°C V<sub>CE</sub> ≤ 6V (3) T<sub>case</sub> = 25°C V<sub>CE</sub> ≤ 7V (4) T<sub>case</sub> = 60°C V<sub>CE</sub> ≤ 6V (5) T<sub>case</sub> = 60°C V<sub>CE</sub> ≤ 7V N : New product / Nouveau produit

# low current fast switching metal case

commutation rapide faible courant — boîtier métal

| Type      |                      | Maximum ratings          |  | Characteristics at 25°C           |     |  |          |                         |                          |                         |  | Case |
|-----------|----------------------|--------------------------|--|-----------------------------------|-----|--|----------|-------------------------|--------------------------|-------------------------|--|------|
| NPN       | PNP                  | P <sub>tot</sub><br>(mW) | V <sub>CEO</sub><br>V <sub>CER</sub> * | h <sub>21E</sub> / I <sub>C</sub> |     | V <sub>CE (sat)</sub> / I <sub>C</sub> /I <sub>B</sub> |          | f <sub>T</sub><br>(MHz) | C <sub>22b</sub><br>(pF) | t <sub>on</sub><br>(ns) | t <sub>s</sub> *<br>t <sub>off</sub><br>(ns) |      |
|           |                      |                          |  | min                               | max | max  | max      |                         |                          |                         |  |      |
| 2N 706    | 2N 706 A<br>2N 753   | 300                      | 20*                                    | 20                                |     | 10   | 0,6      | 10/ 1                   | 200                      | 6                       |  | 60*  |
| 2N 706 A  |                      | 300                      | 15                                     | 20                                | 60  | 10   | 0,6      | 10/ 1                   | 200                      | 5                       | 40   | 75   |
| 2N 753    |                      | 300                      | 15                                     | 40                                | 120 | 10   | 0,6      | 10/ 1                   | 200                      | 5                       | 40   | 75   |
| Δ2N 708   |                      | 360                      | 15                                     | 30                                | 120 | 10   | 0,4      | 10/ 1                   | 300                      | 6                       | 12,5   | 25*  |
| 2N 743    | 2N 744               | 300                      | 12                                     | 20                                | 60  | 10   | 0,35 (6) | 10/ 1                   | 280                      | 5                       | 16   | 24   |
| 2N 744    |                      | 300                      | 12                                     | 40                                | 120 | 10   | 0,35 (6) | 10/ 1                   | 280                      | 5                       | 16   | 24   |
| Δ2N 914   |                      | 360                      | 15                                     | 30                                | 120 | 10   | 0,7      | 200/20                  | 300                      | 6                       | 40   | 40   |
| Δ2N 2368  | 2N 2369 A<br>2N 2894 | 360                      | 15                                     | 20                                | 60  | 10   | 0,25     | 10/ 1                   | 400                      | 4                       | 12   | 15   |
| Δ2N 2369  |                      | 360                      | 15                                     | 40                                | 120 | 10   | 0,25     | 10/ 1                   | 500                      | 4                       | 12   | 18   |
| 2N 2369 A |                      | 360                      | 15                                     | 40                                | 120 | 10   | 0,25     | 30/ 3                   | 500                      | 4                       | 12   | 18   |
| 2N 2894   |                      | 360                      | 12                                     | 40                                | 150 | 30   | 0,2      | 30/ 3                   | 400                      | 6                       | 60   | 90   |



Δ : Devices under CCQ/CCT - Dispositifs soumis au CCQ/CCT (6) T<sub>amb</sub> = 170°C