

# Transistors

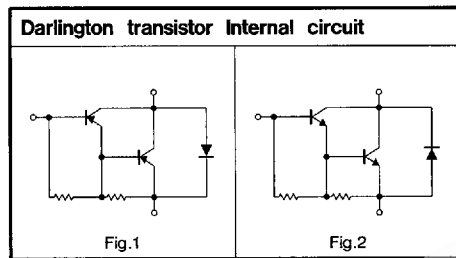
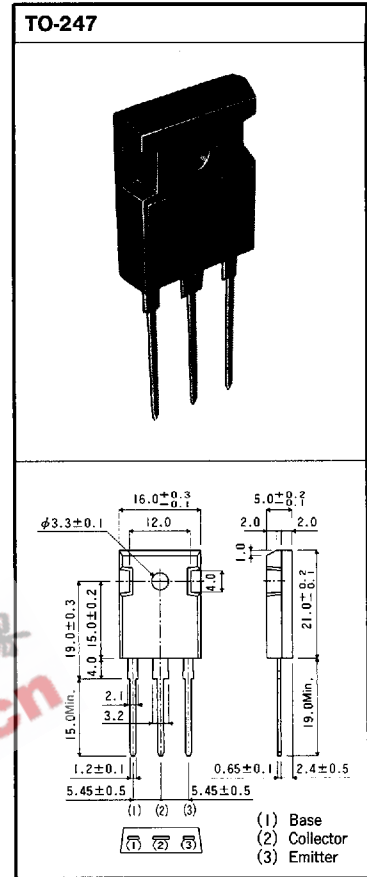
## TO-247

TO-220 class high output power package with  $P_c$  60 to 100W.

(Unit : mm)

| Application       | Part No. | $V_{CE0}$<br>(V) | $I_c$<br>(A) | $P_c$ (W)<br>$T_c = 25^\circ C$ | $h_{FE}$ | $h_{FE}$ Ranking code |           |     | Internal circuit |
|-------------------|----------|------------------|--------------|---------------------------------|----------|-----------------------|-----------|-----|------------------|
|                   |          |                  |              |                                 |          | $V_{CE}$ (V)          | $I_c$ (A) |     |                  |
| Driver            | ☆2SB1477 | -100             | -5           | 60                              | 60~320   | D E F                 | -5        | -1  | -                |
|                   | ☆2SB1345 | -80              | -7           | 80                              | 60~320   | D E F                 | -5        | -1  | -                |
|                   | ☆2SD2236 | 100              | 5            | 60                              | 60~320   | D E F                 | 5         | 1   | -                |
|                   | ☆2SD2062 | 80               | 7            | 80                              | 60~320   | D E F                 | 5         | 1   | -                |
| AudioOutput       | 2SA1788  | -120             | -8           | 80                              | 60~320   | D E F                 | -5        | -1  | -                |
|                   | 2SA1633  | -150             | -10          | 100                             | 60~320   | D E F                 | -5        | -1  | -                |
|                   | ☆2SC4652 | 120              | 8            | 80                              | 60~320   | D E F                 | 5         | 1   | -                |
|                   | 2SC4278  | 150              | 10           | 100                             | 60~320   | D E F                 | 5         | 1   | -                |
| Low $V_{CE(sat)}$ | ☆2SA1789 | -60              | -12          | 80                              | 60~320   | D E F                 | -2        | -2  | -                |
|                   | ☆2SC4653 | 60               | 12           | 80                              | 60~320   | D E F                 | 2         | 2   | -                |
|                   | ☆2SC4847 | 120              | 5 circuit    | 60                              | 60~200   | D E                   | 5         | 3   | -                |
|                   | ☆2SC4850 | 120              | 7 circuit    | 60                              | 60~200   | D E                   | 5         | 3   | -                |
| High Voltage SW   | ☆2SC4277 | 400              | 5            | 80                              | 16~50    | A B                   | 5         | 3   | -                |
|                   | ☆2SC5114 | 500              | 5            | 80                              | 10~50    | -                     | 5         | 2.5 | -                |
|                   | ☆2SC5118 | 550              | 4            | 80                              | 10~50    | -                     | 5         | 2   | -                |
| Darlington        | ☆2SB1478 | -100             | -8           | 60                              | 2k~20k   | -                     | -3        | -2  | Fig.1            |
|                   | ☆2SD2237 | 100              | 8            | 60                              | 2k~20k   | -                     | 3         | 2   | Fig.2            |

Note : ☆ Under development



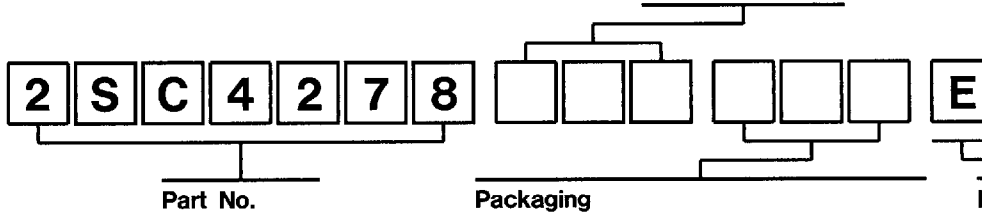
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### Product Designation

- When ordering, specify the type.
- Check each code against the tables shown below.
- Fill a space with the next character.

### Special code

- Omit for standard product.
- Factory assigned for custom product.



### Packaging

| Package | Code | Package specifications | Quantity/Package (pcs) |
|---------|------|------------------------|------------------------|
| TO-247  | None | Bulk                   | 200                    |
|         | F31  | Packed in forming tray | 500                    |

Others package specifications are under consideration.  
Ask for details.

### $h_{FE}$ Ranking code

Input  $h_{FE}$  rank signal display  
One rank preferred  D   
Multiple rank preferred  D  F  
(Min., Max. is displayed)

| Code | $h_{FE}$ Range |
|------|----------------|
| A    | 16~32          |
| B    | 25~50          |
| C    | 40~80          |
| D    | 60~120         |
| E    | 100~200        |
| F    | 160~320        |
| G    | 250~500        |
| H    | 400~800        |
| J    | 600~1200       |
| K    | 1000~2000      |