



# BIPOLAR TRANSISTOR MODULES

## Ratings and Specifications

### 30 1400 volts class power transistor modules

- Power transistors and free wheel diodes are built into one package.
- Terminal layout in which drive wiring and power wiring do not come across.

| Device type | V <sub>CB0</sub> | V <sub>CE0</sub> | V <sub>CEX</sub> | I <sub>c</sub> | P <sub>c</sub> | h <sub>FE</sub> | Switching time (Max.) |                  |                | Package | Net mass<br>Grams | Equivalent circuit<br>Page 32, 33 |         |
|-------------|------------------|------------------|------------------|----------------|----------------|-----------------|-----------------------|------------------|----------------|---------|-------------------|-----------------------------------|---------|
|             | Volts            | Volts            | (sus)<br>Volts   | cont.<br>Amps  | Watts          | min.            | t <sub>on</sub>       | t <sub>stg</sub> | t <sub>r</sub> |         |                   |                                   |         |
|             |                  |                  |                  |                |                |                 | I <sub>c</sub>        | V <sub>CE</sub>  |                |         |                   |                                   |         |
|             |                  |                  |                  |                |                |                 | Amps                  | Volts            | μsec           | μsec    | μsec              |                                   |         |
| 2DI30A-140  | 1400             | 1400             | 1200             | 30             | 300            | 70              | 30                    | 5                | 3.0            | 15      | 3                 | M204 175                          | Fig. E1 |
| 2DI100A-140 | 1400             | 1400             | 1200             | 100            | 800            | 70              | 100                   | 5                | 3.0            | 15      | 3                 | M207 550                          | Fig. E2 |
| 1DI200A-140 | 1400             | 1400             | 1200             | 200            | 1400           | 70              | 200                   | 5                | 3.0            | 15      | 3                 | M105 560                          | Fig. D1 |

### 31 6 in one-package power transistor modules

- 6 power transistors and 6 free wheel diodes are built into one package.
- Terminal layout in which drive wiring and power wiring do not come across.

| Device type | V <sub>CB0</sub> | V <sub>CE0</sub> | V <sub>CE0</sub> | I <sub>c</sub> | P <sub>c</sub> | h <sub>FE</sub> | Switching time (Max.) |                  |                | Package | Net mass<br>Grams | Equivalent circuit<br>Page 34, 35 |         |
|-------------|------------------|------------------|------------------|----------------|----------------|-----------------|-----------------------|------------------|----------------|---------|-------------------|-----------------------------------|---------|
|             | Volts            | Volts            | (sus)<br>Volts   | cont.<br>Amps  | Watts          | min.            | t <sub>on</sub>       | t <sub>stg</sub> | t <sub>r</sub> |         |                   |                                   |         |
|             |                  |                  |                  |                |                |                 | I <sub>c</sub>        | V <sub>CE</sub>  |                |         |                   |                                   |         |
|             |                  |                  |                  |                |                |                 | Amps                  | Volts            | μsec           | μsec    | μsec              |                                   |         |
| 6DI10A-050  | 600              | 600              | 450              | 10             | 80             | 100             | 10                    | 5                | 1.0            | 12      | 2                 | M601 130                          | Fig. H1 |
| EVF31T-050A | 600              | 600              | 450              | 15             | 100            | 100             | 15                    | 5                | 1.0            | 15      | 2.5               | M602 180                          | Fig. H1 |
| 6DI15A-050  | 600              | 600              | 450              | 15             | 80             | 100             | 15                    | 5                | 1.0            | 12      | 2                 | M604 150                          | Fig. H1 |
| 6DI20C-050  | 600              | 600              | 450              | 20             | 120            | 100             | 20                    | 5                | 1.0            | 12      | 2                 | M604 150                          | Fig. H1 |
| 6DI30A-050  | 600              | 600              | 450              | 30             | 150            | 100             | 30                    | 5                | 1.5            | 12      | 3                 | M603 450                          | Fig. H2 |
| 6DI30B-050  | 600              | 600              | 450              | 30             | 200            | 100             | 30                    | 5                | 1.0            | 12      | 2                 | M605 210                          | Fig. H3 |
| 6DI50B-050  | 600              | 600              | 450              | 50             | 230            | 100             | 50                    | 5                | 3.0            | 12      | 4                 | M606 450                          | Fig. H3 |
| 6DI50C-050  | 600              | 600              | 450              | 50             | 230            | 100             | 50                    | 5                | 1.5            | 12      | 3                 | M603 450                          | Fig. H2 |
| 6DI75A-050  | 600              | 600              | 450              | 75             | 350            | 100             | 75                    | 5                | 1.5            | 12      | 3                 | M603 450                          | Fig. H2 |
| 6DI100A-050 | 600              | 600              | 450              | 100            | 400            | 80              | 100                   | 5                | 3.0            | 15      | 4                 | M603 450                          | Fig. H2 |
| 6DI10A-120  | 1200             | 1200             | 1200             | 10             | 100            | 70              | 10                    | 5                | 3.0            | 15      | 3                 | M604 150                          | Fig. J2 |
| 6DI15A-120  | 1200             | 1200             | 1200*            | 15             | 150            | 70              | 15                    | 5                | 3.0            | 15      | 3                 | M605 210                          | Fig. J1 |
| 6DI30A-120  | 1200             | 1200             | 1200*            | 30             | 230            | 70              | 30                    | 5                | 3.0            | 15      | 3                 | M606 450                          | Fig. J1 |

\* V<sub>CEX</sub> (sus)

### 32 Low voltage high current power transistor modules

- Terminal layout in which drive wiring and power wiring do not come across.
- Power transistors and free wheel diodes are built into one package.

| Device type | V <sub>CB0</sub> | V <sub>CE0</sub> | V <sub>CE0</sub> | I <sub>c</sub> | P <sub>c</sub> | h <sub>FE</sub> | Switching time (Max.) |                  |                | Package | Net mass<br>Grams | Equivalent circuit<br>Page 32 |         |
|-------------|------------------|------------------|------------------|----------------|----------------|-----------------|-----------------------|------------------|----------------|---------|-------------------|-------------------------------|---------|
|             | Volts            | Volts            | (sus)<br>Volts   | cont.<br>Amps  | Watts          | min.            | t <sub>on</sub>       | t <sub>stg</sub> | t <sub>r</sub> |         |                   |                               |         |
|             |                  |                  |                  |                |                |                 | I <sub>c</sub>        | V <sub>CE</sub>  |                |         |                   |                               |         |
|             |                  |                  |                  |                |                |                 | Amps                  | Volts            | μsec           | μsec    | μsec              |                               |         |
| 2DI200A-020 | 300              | 300              | 250              | 200            | 500            | 100             | 200                   | 5                | 2.0            | 12      | 3                 | M203 450                      | Fig. C4 |