3 | 1200 volts class IGBT modules

- The turnoff time is one tenth or less that of bipolar transistors, enabling a high conversion ferquency for power converters.
- The voltage drive element enables the drive circuit to be miniaturized and used in common.
- · Because the safe operating area is wide at turnoff, operation is possible at margins under high voltage.

| Device type | Vces volts | V _{GES} volts | ic cont. amps. | Pc watts | V _{CE} (sat) Max. volts | (V _{GE} =15V) lc amps. | Switching time (Max.) | | | Package | Net | Equivalent |
|----------------|---------------|---------------------------|----------------------|-------------|--|---------------------------------------|-----------------------|---------------|-------------|---------|-----------------|----------------------|
| | | | | | | | ton μsec. | toff μsec. | tf μsec. | | weight grams | circuit (Pege 40) |
| 2MBI25-120 | 1200 | ±20 | 25 | 250 | 5.0 | 25 | 1.2 | 1.5 | 1.0 | M211 | 210 | Fig. H2 |
| 2MBI50-120 | 1200 | ±20 | 50 | 400 | 5.0 | 50 | 1,2 | 1.5 | 1.0 | M211 | 210 | Fig. H2 |
| 2MBI75-120 | 1200 | ±20 | 75 | 600 | 5.0 | 75 | 1.2 | 1.5 | 1.0 | M212 | 275 | Fig. H2 |
| 2MBI100-120 | 1200 | ±20 | 100 | 800 | 5.0 | 100 | 1.2 | 1.5 | 1.0 | M213 | 395 | Fig. H2 |
| 2MBI150-120 | 1200 | ±20 | 150 | 1200 | 5.0 | 150 | 2.0 | 2.0 | 1.0 | M210 | 470 | Fig. H2 |
| 1MBI200-120 | 1200 | ±20 | 200 | 1600 | 5.0 | 200 | 2.0 | 2.0 | 1.0 | M106 | 460 | Fig. H1 |
| 1MBI300-120 | 1200 | ±20 | 300 | 2000 | 5.0 | 300 | 2.0 | 2.0 | 1.0 | M106 | 460 | Fig. H1 |

4 1200 volts class 6-pack IGBT modules

• 6 IGBTs and 6 free wheel diodes are built into one package.

• Optimal for miniaturizing and reducing the weight of three-phase 440 to 480 volts input inverters.

| Device | Vces volts | V _{GES} volts | lc cont. amps. | Pc watts | V _{CE} (sat) Max. volts | (V _{GE} =15V) Ic amps. | Switching time (Max.) | | | Package | Net | Equivalent |
|------------|---------------|---------------------------|----------------------|-------------|--|---------------------------------------|-----------------------|---------------|-------------|---------|-----------------|----------------------|
| type | | | | | | | ton μsec. | toff μsec. | tf μsec. | | weight grams | circuit (Page 40) |
| 6MBI8-120 | 1200 | ±20 | 8 | 60 | 5.0 | 8 | 1.2 | 1.5 | 1.0 | M604 | 150 | Fig. H3 |
| 6MBI15-120 | 1200 | ±20 | 15 | 120 | 5.0 | 15 | 1.2 | 1.5 | 1.0 | M607 | 235 | Fig. H4 |
| 6MBI25-120 | 1200 | ±20 | 25 | 250 | 5.0 | 25 | 1.2 | 1.5 | 1,0 | M608 | 510 | Fig. H5 |
| 6MBI50-120 | 1200 | ±20 | 50 | 400 | 5.0 | 50 | 1.2 | 1.5 | 1.0 | M608 | 510 | Fig. H5 |