IGBT MODULES
Ratings and Specifications

1 600 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	V_{CES} volts	V_{GES} volts	I_C cont. amps.	P_C watts	V_{CE}(sat) Max. volts	(V_{GE}=15V) I_C amps.	Switching time (Max.) t_{on} μsec.	t_{off} μsec.	t_f μsec.	Package	Net weight grams	Equivalent circuit (page 40)
2MBI50-060	600	±20	50	250	5.0	50	1.0	1.5	1.0	M211	210	Fig. H2
2MBI75-060	600	±20	75	325	5.0	75	1.0	1.5	1.0	M211	210	Fig. H2
2MBI100-060	600	±20	100	400	5.0	100	1.0	1.5	1.0	M211	210	Fig. H2
2MBI150-060	600	±20	150	600	5.0	150	1.0	1.5	1.0	M212	275	Fig. H2
2MBI200-060	600	±20	200	800	5.0	200	1.0	1.5	1.0	M213	395	Fig. H2
2MBI300-060	600	±20	300	1200	5.0	300	2.0	2.0	1.0	M210	470	Fig. H2
1MBI400-060	600	±20	400	1600	5.0	400	2.0	2.0	1.0	M106	460	Fig. H1

2 600 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 200 to 220 volts input inverters.

Device type	V_{CES} volts	V_{GES} volts	I_C cont. amps.	P_C watts	V_{CE}(sat) Max. volts	(V_{GE}=15V) I_C amps.	Switching time (Max.) t_{on} μsec.	t_{off} μsec.	t_f μsec.	Package	Net weight grams	Equivalent circuit (page 40)
6MBI10-060	600	±20	10	40	5.0	10	1.2	1.5	1.0	M604	150	Fig. H3
6MBI15-060	600	±20	15	60	5.0	15	1.0	1.5	1.0	M604	150	Fig. H3
6MBI20-060	600	±20	20	80	5.0	20	1.2	1.5	1.0	M604	150	Fig. H3
6MBI30-060	600	±20	30	120	5.0	30	1.2	1.5	1.0	M607	235	Fig. H4
6MBI50-060	600	±20	50	250	5.0	50	1.0	1.5	1.0	M608	510	Fig. H5
6MBI75-060	600	±20	75	300	5.0	75	1.0	1.5	1.0	M608	510	Fig. H5
6MBI100-060	600	±20	100	400	5.0	100	1.0	1.5	1.0	M608	510	Fig. H5

Letter symbols

V_{CES} : Collector-to-emitter rated voltage (Gate-to-emitter short-circuited)
V_{GES} : Gate-to-emitter rated voltage (Collector-to-emitter short-circuited)
I_C : Rated collector current
P_C : Collector power dissipation
V_{CE} (sat) : Collector-to-emitter saturation voltage
t_{on} : Turnon time
t_{off} : Turnoff time
t_f : Fall time