

## 1 IGBT mold types

- High speed switching
- Voltage drive method permits low power drive
- Suited for high frequency power supplies, such as microwave ovens
- When using these IGBTs, FUJI's fast recovery diode ERD60-100 is required.
- Low saturation voltage

Device type	V <sub>CE(s)</sub>	V <sub>GE(s)</sub>	I <sub>c</sub>	P <sub>c</sub>	V <sub>CE(sat)</sub>	Switching time (Max.)			Package	Net mass Grams
	Volts	Volts	cont. Amps	Watts	Max. Volts	t <sub>on</sub> μsec.	t <sub>off</sub> μsec.	t <sub>r</sub> μsec.		
1MBH60-090	900	±20	60	260	3.2	—	—	1.0	TO3PL	9.5
1MBH60-100	1000	±20	60	260	3.4	—	—	1.0	TO3PL	9.5
1MBH65-090	900	±20	65	260	3.0	—	—	1.0	TO3PL	9.5
1MBH65-100	1000	±20	65	300	3.2	—	—	1.0	TO3PL	9.5

## Fast recovery diode for IGBT

Device type	V <sub>RRM</sub>	I <sub>F</sub>	P <sub>c</sub>	I <sub>r</sub>	V <sub>F</sub>	t <sub>r</sub>	R <sub>th(j-c)</sub>	Package	Net mass Grams
	Volts	Amps	Watts	μA	Volts	μsec.	°C/W		
ERD60-100	1000	15	40	100	2.5	3.0	3.1	TO220AB	2
ERD65-090	900	30	50	100	1.4	4.4	2.5	TO3PF	6.0

## 2 600 volts class IGBT modules/High speed switching (L series)

- High speed switching
- Voltage drive method permits low power drive

Device type	V <sub>CE(s)</sub>	V <sub>GE(s)</sub>	I <sub>c</sub>	P <sub>c</sub>	V <sub>CE(sat)</sub>	Switching time (Max.)			Package	Net mass Grams	Equivalent circuit Page 53
	Volts	Volts	cont. Amps	Watts	Max. Volts	t <sub>on</sub> μsec.	t <sub>off</sub> μsec.	t <sub>r</sub> μsec.			
2MBI50L-060	600	±20	50	250	3.5	0.8	1.0	0.35	M218	210	Fig. 2
2MBI75L-060	600	±20	75	325	3.5	0.8	1.0	0.35	M218	210	Fig. 2
2MBI100L-060	600	±20	100	400	3.5	0.8	1.0	0.35	M218	210	Fig. 2
2MBI150L-060	600	±20	150	600	3.5	0.8	1.0	0.35	M219	340	Fig. 2
2MBI150LB-060	600	±20	150	600	3.5	0.8	1.0	0.35	M221	250	Fig. 2
2MBI200L-060	600	±20	200	800	3.5	0.8	1.0	0.35	M219	340	Fig. 2
2MBI200LB-060	600	±20	200	800	3.5	0.8	1.0	0.35	M221	250	Fig. 2
2MBI300L-060	600	±20	300	1200	3.5	0.8	1.0	0.35	M217	410	Fig. 2
2MBI300LB-060	600	±20	300	1200	3.5	0.8	1.0	0.35	M225	380	Fig. 2
2MBI400L-060	600	±20	400	1600	3.5	0.8	1.0	0.35	M225	380	Fig. 2
1MBI300L-060	600	±20	300	1200	3.5	0.8	1.0	0.35	M116	415	Fig. 1
1MBI400L-060	600	±20	400	1600	3.5	0.8	1.0	0.35	M116	415	Fig. 1
1MBI600LP-060	600	±20	600	2000	3.5	1.0	1.2	0.5	M121	370	Fig. 1
1MBI600LN-060	600	±20	600	2000	3.5	1.0	1.2	0.5	M122	370	Fig. 1

### Letter symbols

V<sub>CE(s)</sub>: Collector-to-emitter rated voltage  
(Gate-to-emitter short-circuited)

V<sub>GE(s)</sub>: Gate-to-emitter rated voltage  
(Collector-to-emitter short-circuited)

I<sub>c</sub>: Rated collector current

P<sub>c</sub>: Maximum power dissipation

V<sub>CE(sat)</sub>: Collector-to-emitter saturation voltage

t<sub>on</sub>: Turn-on time

t<sub>off</sub>: Turn-off time

t<sub>r</sub>: Fall time