

DISCRETE IGBT



600 VOLT, DISCRETE IGBT

• 5 - 50 Amps

Device Type	V _{CES} Volts	I _C T _C =25°C T _C =80°C T _C =100°C			P _C Watts	V _{CE(sat)} Max. Volts	V _{GE} = 15V I _C Amps	Switching Time (Max.)			R _{TH} IGBT °C/W	Pkg.
		Amps	Amps	Amps				t _{on} μsec.	t _{off} μsec.	t _f μsec.		
1MBC05-060	600	13	-	5	50	3.0	5	1.2	1.0	0.35	2.50	TO-220
1MBC10-060	600	20	-	10	75	3.0	10	1.2	1.0	0.35	1.66	TO-220
1MBC15-060	600	24	15	-	90	3.0	15	1.2	1.0	0.35	1.38	TO-220
1MB20-060	600	38	-	20	145	3.0	20	1.2	1.0	0.35	0.86	TO-3P
1MB30-060	600	48	30	-	180	3.0	30	1.2	1.0	0.35	0.69	TO-3P
1MBH50-060	600	82	-	50	310	3.0	50	1.2	1.0	0.35	0.40	TO-3PL

600 VOLT, DISCRETE IGBT WITH FREE WHEELING DIODE

• 5- 50 Amps

Device Type	V _{CES} Volts	I _C T _C =25°C T _C =100°C		P _C Watts	V _{CE(sat)} Max. Volts	V _{GE} =15V I _C Amps	Switching Time (Max.)			R _{TH} IGBT °C/W	R _{TH} Diode °C/W	V _F Max. Volts	t _{rr} Max. μsec.	Pkg.
		Amps	Amps				t _{on} μsec.	t _{off} μsec.	t _f μsec.					
1MBC05D-060	600	13	5	50	3.0	5	1.2	1.0	0.35	2.50	5.00	3.0	0.3	TO-220
1MBG05D-060	600	13	5	50	3.0	5	1.2	1.0	0.35	2.50	5.00	3.0	0.3	Surface Mt.
1MBH05D-060	600	21	5	80	3.0	5	1.2	1.0	0.35	1.56	3.12	3.0	0.3	TO-3PL
1MBC10D-060	600	20	10	60	2.8	10	1.2	1.0	0.35	2.08	5.00	3.0	0.3	TO-220
1MBG10D-060	600	20	10	75	3.0	10	1.2	1.0	0.35	1.66	3.57	3.0	0.3	Surface Mt.
1MBH10D-060	600	30	10	115	3.0	10	1.2	1.0	0.35	1.08	2.27	3.0	0.3	TO-3PL
1MB15D-060	600	33	15	95	2.8	15	1.2	1.0	0.35	1.32	2.08	3.0	0.3	TO-3P
1MBH15D-060	600	26	15	140	3.0	15	1.2	1.0	0.35	0.89	1.66	3.0	0.3	TO-3PL
1MB20D-060	600	38	20	110	2.8	20	1.2	1.0	0.35	1.14	1.79	3.0	0.3	TO-3P
1MBH20D-060	600	45	20	170	3.0	20	1.2	1.0	0.35	0.73	1.31	3.0	0.3	TO-3PL
1MBH30D-060	600	58	30	220	3.0	30	1.2	1.0	0.35	0.56	1.04	3.0	0.3	TO-3PL
1MBH50D-060	600	82	50	310	3.0	50	1.2	1.0	0.35	0.40	0.89	3.0	0.3	TO-3PL

600 VOLT, FREE WHEELING DIODE FOR IGBTs

• 5 - 50 Amps

Device Type	V _{RRM} Volts	I _F Avg. Amps	P _D Watts	R _{TH} Diode °C/W	V _F Max. Volts	t _{rr} Max. μsec.	Pkg.
ERW03-060	600	7	45	2.77	3.0	0.3	TO-220
ERW04-060	600	8	55	2.27	3.0	0.3	TO-220
ERW05-060	600	11	70	1.78	3.0	0.3	TO-220
ERW06-060	600	17	110	1.14	3.0	0.3	TO-3P
ERW13-060	600	50	140	.89	3.0	0.3	TO-3PL



DISCRETE IGBT

1000 & 1400 VOLT, DISCRETE IGBT

- Soft switching applications

Device Type	V _{CES}	V _{GES}	I _C	P _C	V _{CE(sat)}	V _{GE} = 15V	Switching Time (Max.)			Pkg.
	Volts	Volts	Cont. Amps	Watts	Max. Volts	I _C Amps	t _{on}	t _{off}	t _f	
1MB12-140	1400	±20	12	100	6.0	12	-	1.2	1.0	TO-3PF
1MBH60-100	1000	±20	60	260	3.6	60	-	-	0.85	TO-3PL

1200 VOLT, DISCRETE IGBT

- 2.5 - 25 Amps

Device Type	V _{CES}	I _C		P _C	V _{CE(sat)}	V _{GE} = 15V	Switching Time (Max.)			R _{TH}	Pkg.
	Volts	T _C =25°C Amps	T _C =100°C Amps	Watts	Max. Volts	I _C Amps	t _{on}	t _{off}	t _f	IGBT °C/W	
1MBC03-120	1200	5	2.5	70	3.5	2.5	1.2	1.5	0.5	1.78	TO-220
1MB05-120	1200	9	5	100	3.5	5	1.2	1.5	0.5	1.25	TO-3P
1MB08-120	1200	13	8	115	3.5	8	1.2	1.5	0.5	1.08	TO-3P
1MB10-120	1200	16	10	135	3.5	10	1.2	1.5	0.5	0.92	TO-3P
1MBH15-120	1200	26	15	245	3.5	15	1.2	1.5	0.5	0.57	TO-3PL
1MBH25-120	1200	38	25	310	3.5	25	1.2	1.5	0.5	0.40	TO-3PL

1200 VOLT, DISCRETE IGBT WITH FREE WHEELING DIODE

- 3 - 25 Amps

Device Type	V _{CES}	I _C		P _C	V _{CE(sat)}	V _{GE} = 15V	Switching Time (Max.)			R _{TH}	R _{TH}	V _F	t _{rr}	Pkg.
	Volts	T _C =25°C Amps	T _C =100°C Amps	Watts	Max. Volts	I _C Amps	t _{on}	t _{off}	t _f	IGBT °C/W	Diode °C/W	Max. Volts	Max. μsec.	
1MB03D-120	1200	5	2.5	70	3.5	3	1.2	1.5	0.5	1.78	3.12	3.0	0.35	TO-3P
1MBH03D-120	1200	5.5	2.5	95	3.5	2.5	12	1.5	0.5	1.32	2.50	30	0.35	TO-3PL
1MB05D-120	1200	9	5	95	3.5	5	1.2	1.5	0.5	1.32	2.08	3.0	0.35	TO-3P
1MBH05D-120	1200	10	5	115	3.5	5	1.2	0.6	1.5	1.08	1.66	3.0	0.35	TO-3PL
1MB08D-120	1200	13	8	110	3.5	8	1.2	1.5	0.5	1.14	1.79	3.0	0.35	TO-3P
1MBH08D-120	1200	15	8	135	3.5	8	1.2	1.5	0.5	0.92	1.47	3.0	0.35	TO-3PL
1MB10D-120	1200	16	10	120	3.5	10	1.2	1.5	0.5	1.04	1.56	3.0	0.35	TO-3P
1MBH10D-120	1200	18	10	155	3.5	10	1.2	1.5	0.5	0.80	1.19	3.0	0.35	TO-3PL
1MBH15D-120	1200	26	15	140	3.5	15	1.2	1.0	0.5	0.89	1.39	3.0	0.35	TO-3PL
1MBH25D-120	1200	38	25	240	3.5	25	1.2	1.0	0.5	0.52	1.14	3.0	0.35	TO-3PL

1200 VOLT, FREE WHEELING DIODE FOR IGBTs

- 2.5 - 25 Amps

Device Type	V _{RRM}	I _F	P _D	R _{TH}	V _F	t _{rr}	Pkg.
	Volts	Ave. Amps	Watts	Diode °C/W	Max. Volts	Max. μsec.	
ERW07-120	1200	2.5	20	6.25	3.0	0.3	TO-220
ERW08-120	1200	4	35	4.16	3.0	0.3	TO-220
ERW09-120	1200	6	50	2.50	3.0	0.3	TO-220
ERW10-120	1200	8	60	2.08	3.0	0.3	TO-220
ERW11-120	1200	12	90	1.39	3.0	0.3	TO-3P
ERW12-120	1200	14	110	1.13	3.0	0.3	TO-3P