



SECOND GENERATION IGBT

600 VOLT, F-SERIES MODULES, PT TECHNOLOGY

- Low saturation voltage

Device Type	V _{CES}	I _C Cont.	P _C PerIGBT	V _{CE(sat)} Max.	V _{GE} =15V I _C	Switching Time (Max.)			R _{TH} IGBT	R _{TH} Diode	V _F Max.	t _{rr} Max.	Pkg.
	Volts	Amps	Watts	Volts	Amps	t _{on} μsec.	t _{off} μsec.	t _r μsec.	°C/W	°C/W	Volts	μsec.	
DUALS													
2MBI50F-060	600	50	220	2.5	50	0.8	1.5	1.0	0.568	1.330	2.5	0.3	M218
2MBI75F-060	600	75	290	2.5	75	0.8	1.5	1.0	0.431	0.888	2.5	0.3	M218
2MBI100F-060	600	100	360	2.5	100	0.8	1.5	1.0	0.347	0.666	2.5	0.3	M218
2MBI150F-060	600	150	540	2.5	150	0.8	1.5	1.0	0.231	0.444	2.5	0.3	M219
2MBI200F-060	600	200	720	2.5	200	0.8	1.5	1.0	0.174	0.333	2.5	0.3	M219
2MBI300F-060	600	300	1080	2.5	300	0.8	1.5	1.0	0.116	0.222	2.5	0.3	M217
SINGLES													
1MBI300F-060	600	300	1080	2.5	300	0.8	1.5	1.0	0.116	0.222	2.5	0.3	M116
1MBI400F-060	600	400	1440	2.5	400	0.8	1.5	1.0	0.087	0.167	2.5	0.3	M116

600 VOLT, L-SERIES MODULES, PT TECHNOLOGY

- Single, 30 - 75 Amps

Device Type	V _{CES}	V _{GES}	I _C	P _C	V _{CE(sat)}	V _{GE = 15V}	Switching Time (Max.)			Pkg.
	Volts	Volts	Cont. Amps	Per IGBT Watts	Max. Volts	I _C Amps	t _{on} μsec.	t _{off} μsec.	t _f μsec.	
1MBI30L-060	600	±20	30	120	3.5	30	0.8	1.0	0.35	M110
1MBI50L-060	600	±20	50	200	3.5	50	0.8	1.0	0.35	M110
1MBI75L-060	600	±20	75	300	3.5	75	0.8	1.0	0.35	M110

600 VOLT, L-SERIES MODULES, PT TECHNOLOGY

- High speed switching

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	Cont. Amps	Per IGBT Watts	Max. Volts	I _C Amps	t _{on} μsec.	t _{off} μsec.	t _f μsec.	IGBT °C/W	Diode °C/W	Max. Volts	μsec.	
DUALS													
2MBI50L-060	600	50	250	3.5	50	0.8	1.0	0.35	0.500	1.00	2.5	0.3	M218
2MBI75L-060	600	75	325	3.5	75	0.8	1.0	0.35	0.385	0.85	2.5	0.3	M218
2MBI100L-060	600	100	400	3.5	100	0.8	1.0	0.35	0.312	0.60	2.5	0.3	M218
2MBI150L-060	600	150	600	3.5	150	0.8	1.0	0.35	0.208	0.40	2.5	0.3	M219
2MBI150LB-060	600	150	600	3.5	150	0.8	1.0	0.35	0.208	0.40	2.5	0.3	M221
2MBI200L-060	600	200	800	3.5	200	0.8	1.0	0.35	0.156	0.30	2.5	0.3	M219
2MBI200LB-060	600	200	800	3.5	200	0.8	1.0	0.35	0.156	0.30	2.5	0.3	M221
2MBI300L-060	600	300	1200	3.5	300	0.8	1.0	0.35	0.104	0.20	2.5	0.3	M217
2MBI300LB-060	600	300	1200	3.5	300	0.8	1.0	0.35	0.104	0.20	2.5	0.3	M225
2MBI400L-060	600	400	1600	3.5	400	0.8	1.0	0.35	0.078	0.15	2.5	0.3	M225
SINGLES													
1MBI300L-060	600	300	1200	3.5	300	0.8	1.0	0.35	0.104	0.25	2.5	0.3	M116
1MBI400L-060	600	400	1600	3.5	400	0.8	1.0	0.35	0.078	0.15	2.5	0.3	M116
1MBI600LN-060	600	600	2000	3.5	600	1.0	1.2	0.50	0.063	0.10	2.5	0.3	M122
1MBI600LP-060	600	600	2000	3.5	600	1.0	1.2	0.50	0.063	0.10	2.5	0.3	M121



SECOND GENERATION IGBT

600 VOLT, F-SERIES 6-PACK MODULES, PT TECHNOLOGY

- Low saturation voltage

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	Cont. Amps	Per IGBT Watts	Max. Volts	I _C Amps	t _{on} μsec.	t _{off} μsec.	t _f μsec.	IGBT °C/W	Diode °C/W	Max. Volts	Max. μsec.	
6MBI10F-060	600	10	40	2.5	10	0.8	1.5	1.0	3.130	4.150	2.5	0.3	M604
6MBI15F-060	600	15	60	2.5	15	0.8	1.5	1.0	2.080	3.300	2.5	0.3	M604
6MBI20F-060	600	20	80	2.5	20	0.8	1.5	1.0	1.560	3.010	2.5	0.3	M604
6MBI30F-060	600	30	120	2.5	30	0.8	1.5	1.0	1.040	2.010	2.5	0.3	M607
6MBI30FA-060	600	30	120	2.5	30	1.5	1.5	1.0	1.040	2.010	2.5	0.3	M603
6MBI50F-060	600	50	220	2.5	50	0.8	1.5	1.0	0.568	1.330	2.5	0.3	M616
6MBI50FA-060	600	50	220	2.5	50	1.5	1.5	1.0	0.568	0.1330	2.5	0.3	M603
6MBI75F-060	600	75	290	2.5	75	0.8	1.5	1.0	0.431	0.888	2.5	0.3	M616
6MBI75FA-060	600	75	290	2.5	75	1.5	1.5	1.0	0.431	0.888	2.5	0.3	M603
6MBI100F-060	600	100	360	2.5	100	0.8	1.5	1.0	0.347	0.666	2.5	0.3	M616
6MBI100FA-060	600	100	360	2.5	100	1.5	1.5	1.0	0.347	0.666	2.5	0.3	M603
6MBI150FB-060	600	150	400	2.5	150	1.5	1.5	1.0	0.227	0.417	2.5	0.3	M618
6MBI200FB-060	600	200	500	2.5	200	1.5	1.5	1.0	0.208	0.313	2.5	0.3	M618

600 VOLT, L-SERIES 6-PACK MODULES, PT TECHNOLOGY

- High speed switching

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	Cont. Amps	Per IGBT Watts	Max. Volts	I _C Amps	t _{on} μsec.	t _{off} μsec.	t _f μsec.	IGBT °C/W	Diode °C/W	Max. Volts	Max. μsec.	
6MBI10L-060	600	10	40	3.5	10	0.8	1.0	0.35	3.130	4.15	2.5	0.3	M604
6MBI15L-060	600	15	60	3.5	15	0.8	1.0	0.35	2.080	3.30	2.5	0.3	M604
6MBI20L-060	600	20	80	3.5	20	0.8	1.0	0.35	1.560	3.01	2.5	0.3	M604
6MBI30L-060	600	30	120	3.5	30	0.8	1.0	0.35	1.040	2.01	2.5	0.3	M607
6MBI50L-060	600	50	250	3.5	50	0.8	1.0	0.35	0.500	1.00	2.5	0.3	M616
6MBI75L-060	600	75	325	3.5	75	0.8	1.0	0.35	0.385	0.85	2.5	0.3	M616
6MBI100L-060	600	100	400	3.5	100	0.8	1.0	0.35	0.312	0.60	2.5	0.3	M616

600 VOLT, L-SERIES 6-PACK, SIL PACKAGE MODULE, PT TECHNOLOGY

- Compact single-in-line package

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	Cont. Amps	Per IGBT Watts	Max. Volts	I _C Amps	t _{on} μsec.	t _{off} μsec.	t _f μsec.	IGBT °C/W	Diode °C/W	Max. Volts	Max. μsec.	
6MBI15LS-060	600	15	50	3.5	15	0.8	1.0	0.35	2.50	4.30	2.5	0.3	M619



SECOND GENERATION IGBT

1200 VOLT, F-SERIES MODULES, PT TECHNOLOGY

• Low saturation voltage

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	Cont. Amps	Per IGBT Watts	Max. Volts	I _C Amps	t _{on}	t _{off}	t _f	IGBT °C/W	Diode °C/W	Max. Volts	Max. μsec.	
DUALS													
2MBI25F-120	1200	25	220	2.5	25	0.8	1.5	1.0	0.568	1.330	2.5	0.35	M218
2MBI50F-120	1200	50	360	2.5	50	0.8	1.5	1.0	0.347	0.666	2.5	0.35	M218
2MBI75F-120	1200	75	540	2.5	75	0.8	1.5	1.0	0.231	0.444	2.5	0.35	M216
2MBI100F-120	1200	100	720	2.5	100	0.8	1.5	1.0	0.174	0.333	2.5	0.35	M215
2MBI150F-120	1200	150	1080	2.5	150	0.8	1.5	1.0	0.116	0.222	2.5	0.35	M215
SINGLES													
1MBI200F-120	1200	200	1440	2.5	200	0.8	1.5	1.0	0.087	0.167	2.5	0.35	M116
1MBI300F-120	1200	300	1800	2.5	300	0.8	1.5	1.0	0.069	0.111	2.5	0.35	M116

1200 VOLT, L-SERIES MODULES, PT TECHNOLOGY

• High speed switching

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	Cont. Amps	Per IGBT Watts	Max. Volts	I _C Amps	t _{on}	t _{off}	t _f	IGBT	Diode	Max. Volts	Max. μsec.	
DUALS													
2MBI25L-120	1200	25	250	3.5	25	0.8	1.5	0.5	0.500	1.000	2.5	0.35	M218
2MBI50L-120	1200	50	400	3.5	50	0.8	1.5	0.5	0.312	0.600	2.5	0.35	M218
2MBI75L-120	1200	75	600	3.5	75	0.8	1.5	0.5	0.208	0.400	2.5	0.35	M216
2MBI100L-120	1200	100	800	3.5	100	0.8	1.5	0.5	0.156	0.300	2.5	0.35	M215
2MBI150L-120	1200	150	1200	3.5	150	0.8	1.5	0.5	0.104	0.200	2.5	0.35	M215
2MBI200L-120	1200	200	1600	3.5	200	0.8	1.5	0.5	0.078	0.150	2.5	0.35	M225
SINGLES													
1MBI200L-120	1200	200	1600	3.5	200	0.8	1.5	0.5	0.078	0.150	2.5	0.35	M116
1MBI300L-120	1200	300	2000	3.5	300	0.8	1.5	0.5	0.063	0.100	2.5	0.35	M116
1MBI400L-120	1200	400	2600	3.5	400	0.8	1.5	0.5	0.048	0.075	2.5	0.35	M116

1200 VOLT, F-SERIES 6-PACK MODULES, PT TECHNOLOGY

• Low saturation voltage

Device Type	V _{CES} Volts	I _C Cont. Amps	P _C Per IGBT 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.
6MBI8F-120	1200	8	60	2.5	8	0.8	1.5	1.0	2.080	3.300	2.5	0.35	M604
6MBI15F-120	1200	15	120	2.5	15	0.8	1.5	1.0	1.040	2.010	2.5	0.35	M607
6MBI25F-120	1200	25	220	2.5	25	0.8	1.5	1.0	0.568	1.330	2.5	0.35	M616
6MBI50F-120	1200	50	360	2.5	50	0.8	1.5	1.0	0.347	0.666	2.5	0.35	M616

1200 VOLT, L-SERIES 6-PACK MODULES, PT TECHNOLOGY

• High speed switching

Device Type	V _{CES} Volts	I _C Cont. Amps	P _C Per IGBT 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.
6MBI8L-120	1200	8	60	3.5	8	0.8	1.5	0.5	2.080	3.30	2.5	0.35	M604
6MBI15L-120	1200	15	120	3.5	15	0.8	1.5	0.5	1.040	2.01	2.5	0.35	M607
6MBI25L-120	1200	25	250	3.5	25	0.8	1.5	0.5	0.500	1.00	2.5	0.35	M616
6MBI25LB-120	1200	25	250	3.5	25	0.8	1.5	0.5	0.500	1.00	2.5	0.35	M607
6MBI50L-120	1200	50	400	3.5	50	0.8	1.5	0.5	0.312	0.60	2.5	0.35	M616