

1.7 Power MOSFET Modules

Hitachi has developed two module packages, each incorporating two independent power MOSFETs with channel power dissipations of 200W or 300W per FET chip (depending on the

module type). These devices incorporate high speed source / drain diodes.

Table 12 shows typical characteristics and the equivalent circuit.

Table 12 : Power MOSFET Modules

Package	Type Number	Absolute Maximum Ratings				Electrical Characteristics (typ.)						Equivalent Circuit
		VDSS (V)	VGSS (V)	ID (A)	Pch * (W)	RDS(on) (Ω)		lyfsl (S) **	ton (ns)	toff (ns)	trr (ns)	
						typ.	max.					
F	PM45302F	450	± 20	30	200	0.13	0.2	25	580	900	200	A
	PM50302F	500				0.15						
C	PM45502C	450	± 20	50	300	0.08	0.12	40	850	1400	200	A
	PM50502C	500				0.09						
J	PM4550J	450	± 30	50	300	0.15	0.2	30	485	740	130	B
	PM5050J	500				0.16						
	PM4575J	450		75	350	0.11	0.15	45	680	1060		
	PM5075J	500				0.12						
K	PM50100K	500	± 30	100	400	0.08	0.1	55	800	1600	180	B
	PM50150K			175	450	0.06	0.08	80	1000	2000		

Notes :

□ : Built in high speed diode version

* : Value at Tc = 25°C

