

MITSUBISHI FAST RECOVERY DIODE MODULE

RM600DY-66S

HIGH POWER SWITCHING USE
INSULATED TYPE

HVDi (High Voltage Diode) Module

RM600DY-66S



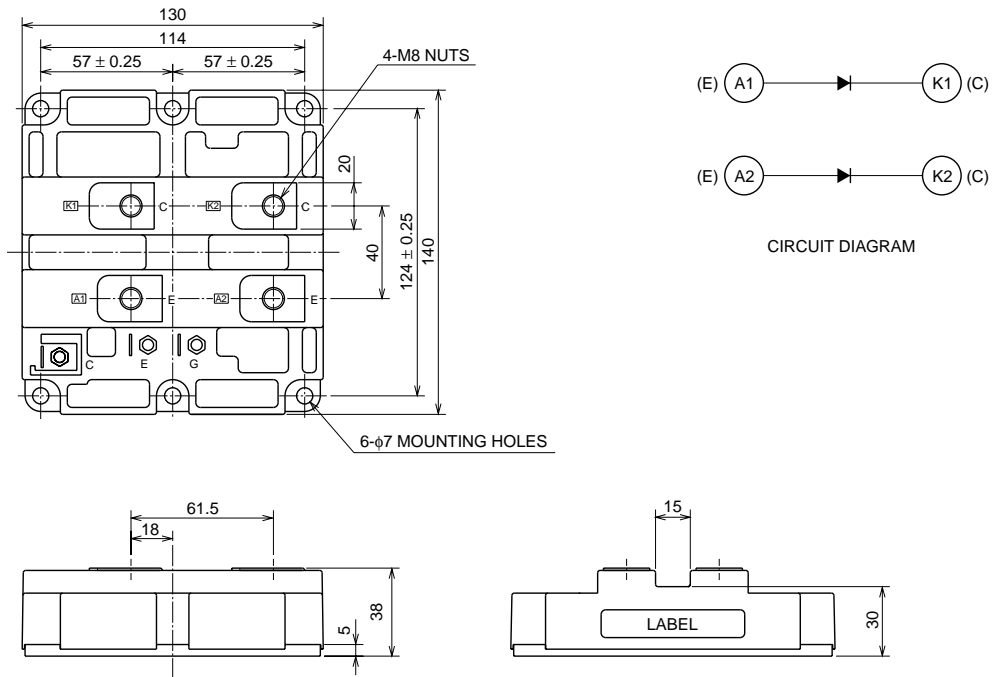
- IDC600A
- VRRM 3300V
- Insulated type
- 2-element in a pack

APPLICATION

3-level inverters, 3-level converters, DC choppers.

OUTLINE DRAWING & CIRCUIT DIAGRAM

Dimensions in mm



Mar. 2003



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ABSOLUTE MAXIMUM RATINGS (Tj = 25°C)

Symbol	Item	Voltage class		Unit
		66		
VRRM	Repetitive peak reverse voltage	3300		V
VRSM	Non-repetitive peak reverse voltage	3300		V
VR(DC)	Reverse DC voltage	2200		V

Symbol	Item	Conditions	Ratings	Unit
IDC	Output DC current	Tc = 25°C	600	A
IFSM	Surge (non-repetitive) forward current	1 cycle of half wave 60Hz, peak value, non-repetitive, Tj = 25°C start, VRM = 0V	4800	A
I ² t	I ² t for fusing	Value of one cycle surge current, tw = 8.3ms, Tj = 25°C start	9.60 × 10 ⁴	A ² s
Tj	Junction temperature	—	-40 ~ +150	°C
Tstg	Storage temperature	—	-40 ~ +125	°C
Viso	Isolation Voltage	Charged part to base plate, rms, sinusoidal, AC 60Hz 1min.	6000	V
—	Mounting torque	Main terminals screw M8	6.67 ~ 13.00	N · m
—		Mounting screw M6	2.84 ~ 6.00	N · m
—	Mass	Typical value	1.5	kg

ELECTRICAL CHARACTERISTICS (Tj = 25°C)

Symbol	Item	Test conditions	Limits			Unit
			Min	Typ	Max	
IRRM	Repetitive reverse current	VRRM applied, VRM = VRRM	—	—	4	mA
VFM	Forward voltage	IFM = 600A	—	3.50	4.55	V
t _{rr}	Reverse recovery time	IFM = 600A, di/dt = -1200A/μs,	—	—	1.20	μs
Q _{rr}	Reverse recovery charge	VR = 1650V	—	150	—	μC
R _{th(j-c)}	Termal resistance	Junction to case (Per 1/2 module)	—	—	0.048	K/W
R _{th(c-f)}	Contact thermal resistance	Case to fin, conductive grease applied (Per 1/2 module)	—	0.024	—	K/W



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PERFORMANCE CURVES

81.563

