DIODE MODULE

DD200GB

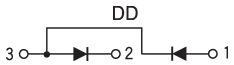
UL;E76102 (M)

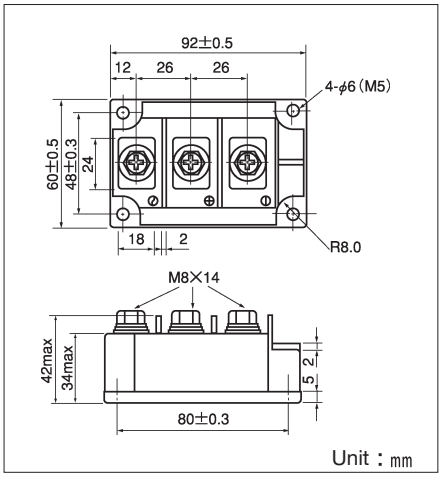
Power Diode Module **DD200GB** series are designed for various rectifier circuits. **DD200GB** has two diode two diode chips connecected in series and the mounting base is electrically isolated from elements for simple heatsink construction. Wide voltage rating up to 800V is available for various input voltages.

- Isolated mounting base
- Two elements in a package for simple (single and three phase) bridge connections
- Highly reliable glass passivated chips
- High surge current capability

(Applications)

Various rectifiers, Battery chargers, DC motor drives





■Maximum Ratings

(Tj=25℃)

Symbol	Item	Ratings		Unit
		DD200GB40	DD200GB80	
VRRM	Repetitive Peak Reverse Voltage	400	800	V
VRSM	Non-Repetitive Peak Reverse Voltage	480	960	V

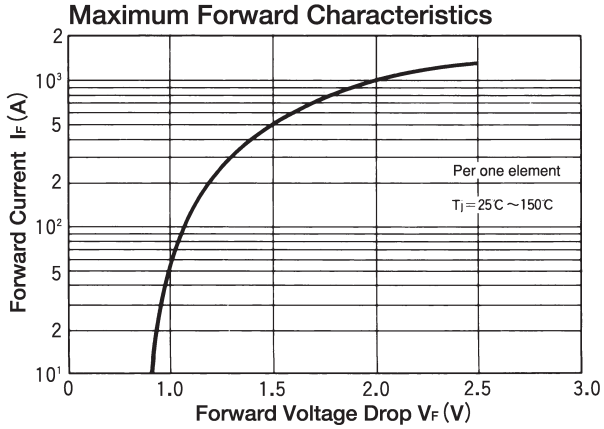
Symbol	Item		Conditions	Ratings	Unit
IF (AV)	Average Forward Current		Single phase, half wave, 180℃conduction, Tc: 96℃	200	A
IF (RMS)	R.M.S. Forward Current		Single phase, half wave, 180℃conduction, Tc: 96℃	310	A
IFSM	Surge Forward Current		½ cycle, 50/60Hz, peak value, non-repetitive	5000/5500	A
I²t	I²t		Value for one cycle of surge current	125000	A²S
Tj	Operating Junction Temperature			−40～+150	℃
Tstg	Storage Temperature			−40～+125	℃
VISO	Isolation Breakdown Voltage (R.M.S.)		A.C. 1 minute	2500	V
	Mounting Torque	Mounting (M5)	Recommended Value 1.5～2.5 (15～25)	2.7 (28)	N·m (kgf·cm)
		Terminal (M8)	Recommended Value 8.8～10 (90～105)	11 (115)	
	Mass		Typical Value	510	g

■Electrical Characteristics

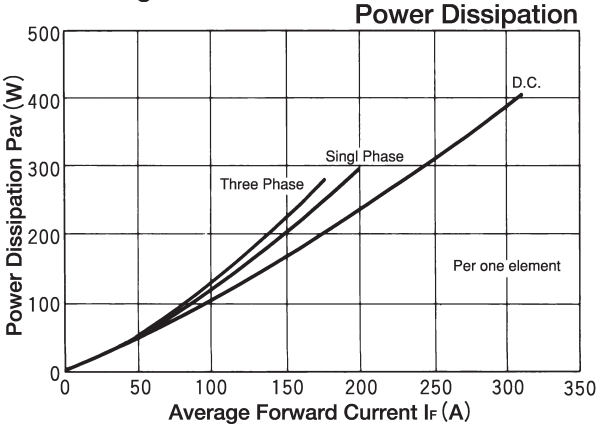
(Tj=25℃)

Symbol	Item	Conditions	Ratings	Unit
IRRM	Repetitive Peak Reverse Current, max.	at VRRM, Single phase, half wave, Tj=150℃	50	mA
VFM	Forward Voltage Drop, max.	Forward current 600A, Tj=25℃, Inst measurement	1.40	V
Rth (j-c)	Thermal Impedance, max.	Junction to case (Per a half module)	0.18	℃/W

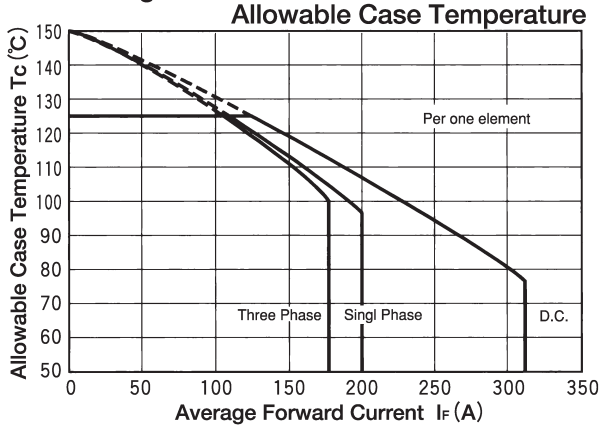
Maximum Forward Characteristics



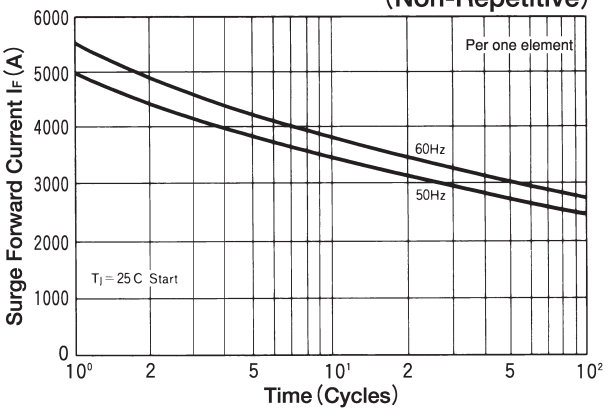
Average Forward Current vs. Power Dissipation



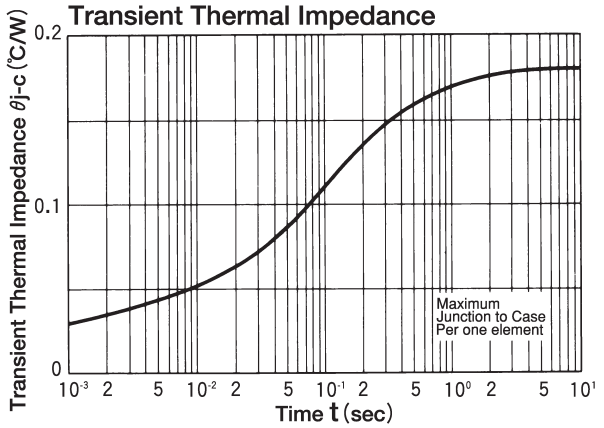
Average Forward Current vs. Allowable Case Temperature



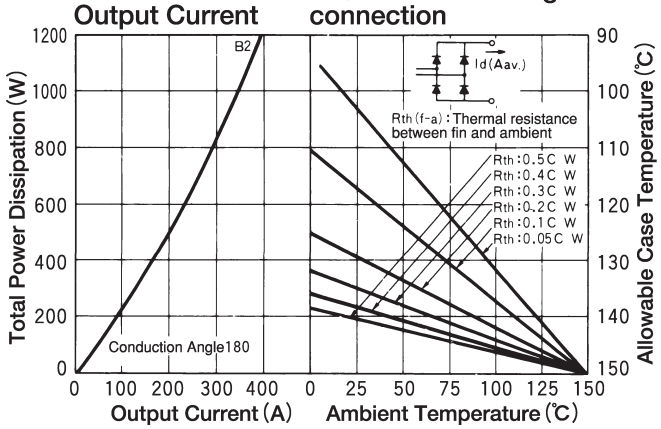
Cycle Surge Forward Current Rating (Non-Repetitive)



Transient Thermal Impedance



Output Current B2;Two Pluse Bridge connection



Output Current B6;Six pulse Bridge connection