

# DIODE MODULE (F.R.D.)

## DD250HB

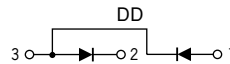
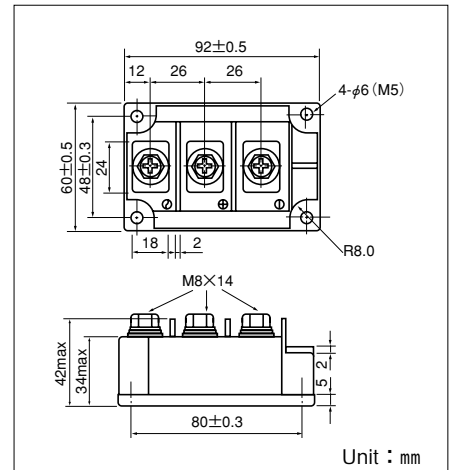
UL;E76102(M)

Power Diode Module **DD250HB** series are designed for various rectifier circuits. **DD250HB** has two diode chips connected in series in a package and the mounting base is electrically isolated from elements for simple heatsink construction. Wide voltage rating up to 1,600V is available for various input voltage.

- Isolated mounting base
- Two elements in a packing 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

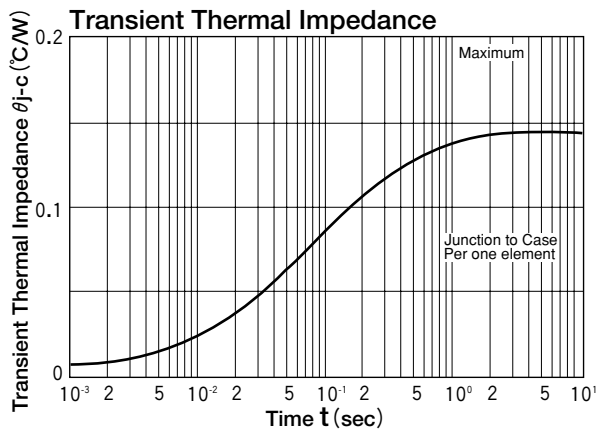
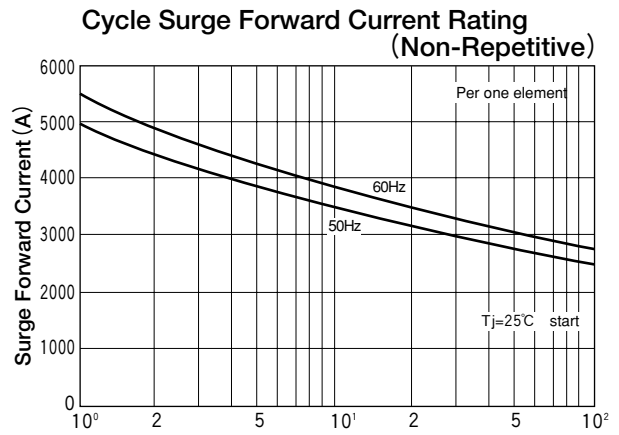
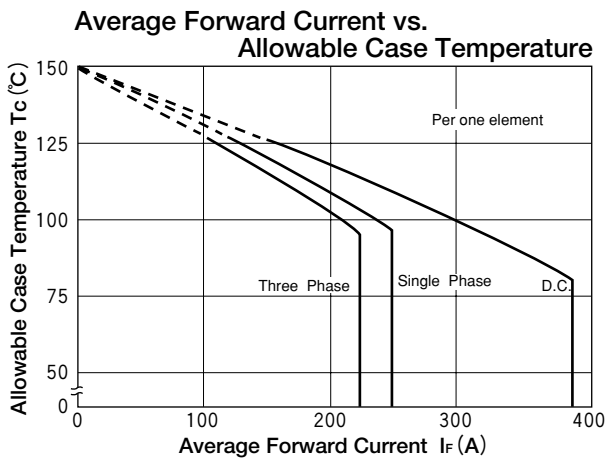
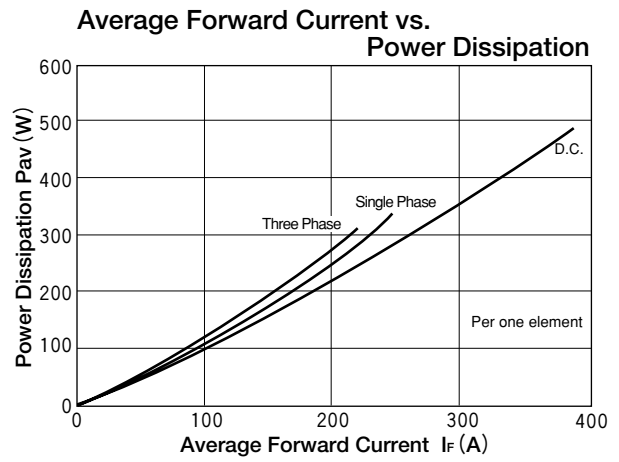
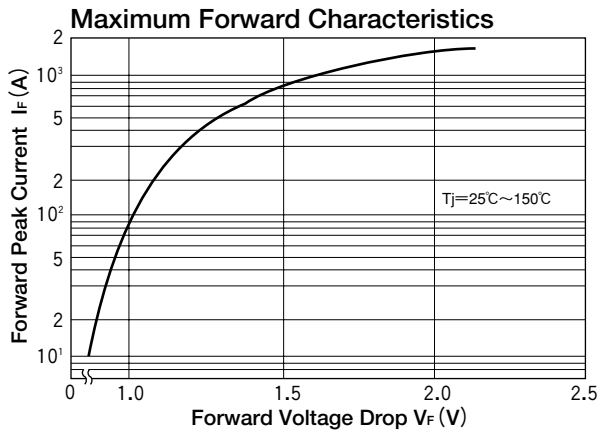
(T<sub>j</sub>=25°C unless otherwise specified)

Symbol	Item	Ratings		Unit
		DD250HB120	DD250HB160	
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage	1200	1600	V
V <sub>RSM</sub>	Non-Repetitive Peak Reverse Voltage	1350	1700	V

Symbol	Item	Conditions	Ratings	Unit	
I <sub>F(AV)</sub>	Average Forward Current	Single phase, half wave, 180°C conduction, T <sub>c</sub> : 94°C	250	A	
I <sub>F(RMS)</sub>	R.M.S. Forward Current	Single phase, half wave, 180°C conduction, T <sub>c</sub> : 94°C	390	A	
I <sub>FSM</sub>	Surge Forward Current	1/2 cycle, 50/60Hz, peak value, non-repetitive	5000/5500	A	
I <sup>2</sup> t	I <sup>2</sup> t	Value for one cycle of surge current	125000	A <sup>2</sup> S	
T <sub>j</sub>	Operating Junction Temperature		-40 to +150	°C	
T <sub>stg</sub>	Storage Temperature		-40 to +125	°C	
V <sub>ISO</sub>	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

Symbol	Item	Conditions	Ratings			Unit
			Min.	Typ.	Max.	
I <sub>RRM</sub>	Repetitive Peak Reverse Current	T <sub>j</sub> =150°C at V <sub>RRM</sub>			50	mA
V <sub>FM</sub>	Forward Voltage Drop	T <sub>j</sub> =25°C, I <sub>FM</sub> =750A, Inst. measurement			1.45	V
R <sub>th(j-c)</sub>	Thermal Impedance	Junction case			0.14	°C/W



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