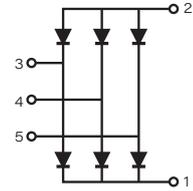


## 3-Phase Diode Bridge

DF150AE80/160  
DF200AE80/160  
(150 A/200 A 800 V/1600 V)



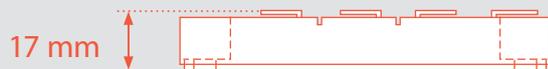
### Applications

- ▶ Motor Drives
- ▶ Servo Controller
- ▶ Primary side rectifier for Welding Machine
- ▶ Induction Heating Equipment
- ▶ Elevator



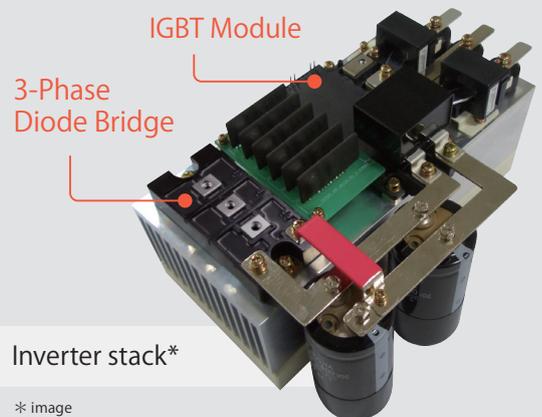
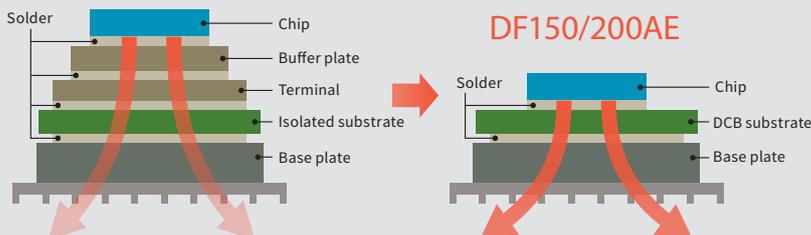
### Features

■ High current capacity within a 17 mm low profile package



■ Designed for assembly with 17 mm high IGBT products

■ Reduced internal layer structure for improved heat dissipation (low thermal resistance) and lighter package



Inverter stack\*

\* image

### Maximum Ratings

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

Item	Symbol	Unit	Ratings			
			DF150AE80	DF150AE160	DF200AE80	DF200AE160
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	800	1600	800	1600
Non-Repetitive Peak Reverse Voltage	V <sub>RSM</sub>	V	960	1700	960	1700

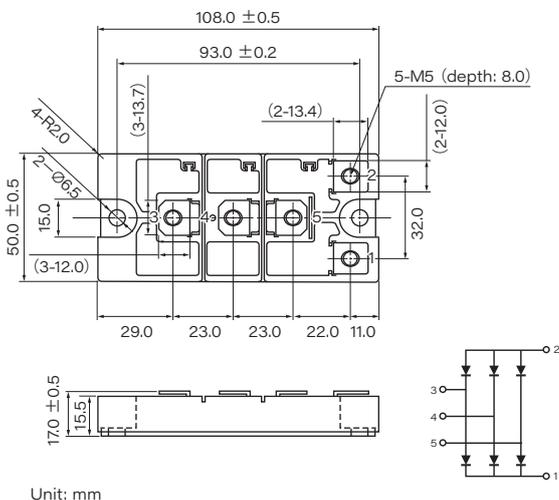
  

Item	Symbol	Unit	Ratings		Conditions
			DF150AE80/160	DF200AE80/160	
Average Output Current	I <sub>D</sub>	A	150	200	3-phase full wave, T <sub>c</sub> = 106 °C
Surge On-state Current	I <sub>FSM</sub>	A	1850/2000	2280/2500	1/2 cycle, 50/60 Hz, Peak value, Non-repetitive
I <sup>2</sup> t (for fusing)	I <sup>2</sup> t	A <sup>2</sup> s	17000	26000	Value for one cycle of surge current
Operating Junction Temperature	T <sub>j</sub>	°C	-40 to +150		
Isolation Voltage	V <sub>ISO</sub>	V	2500		Terminals to Case, AC RMS 1 minute

### Electrical Characteristics

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

Item	Symbol	Unit	Ratings		Conditions
			DF150AE80/160	DF200AE80/160	
Reverse Current	I <sub>RRM</sub>	mA	15.0	20.0	T <sub>j</sub> = 150 °C, at V <sub>RRM</sub>
Forward Voltage Drop	V <sub>FM</sub>	V	1.31	1.32	DF150AE: I <sub>F</sub> = 150 A DF200AE: I <sub>F</sub> = 200 A Inst. measurement
Thermal Resistance	R <sub>th(j-c)</sub>	°C/W	0.11	0.08	Junction to Case (per Element)



### Other Products

#### 3-Phase Diode Bridge DF Series

SIP*1	<b>DF-NA series</b> 20/30 A	
DIP*2	<b>DF-NB series</b> 60 A	
h=17mm package	<b>DF-AC series</b> 75/100 A	
h=22mm package	<b>DF-AA/BA/CA series</b> 75/100/150/200 A	
	<b>DF-LA/LB series</b> 60/75/100 A	

\*1 Single Inline Package \*2 Dual Inline Package

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- Appearance and specifications of products are subject to change without notice for improvement reasons.

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