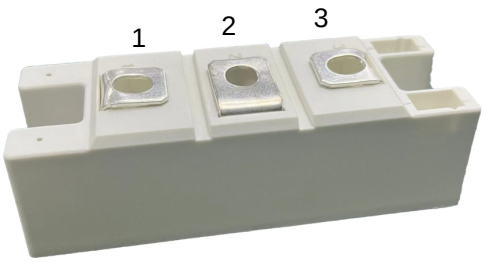
Features

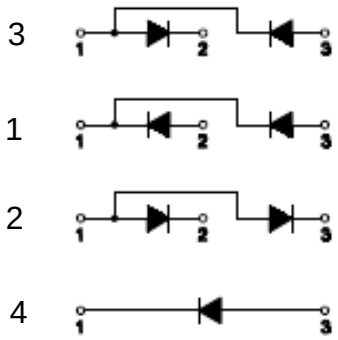
- Blocking voltage：800 to 2000V
- Heat transfer through aluminum oxide DBC Ceramic isolated metal baseplate
- Industrial standard package
- Thick copper baseplate
- 2500 V_{RMS} isolating voltage

B



Typical Applications

- Power Supplies
- AC&DC Motor Drivers
- Bridge Circuits
- Welders
- Battery Supplier



Module Type

Type	V_{DRM}	V_{RSM}
JB1/JB2/JB3/JB4M165-80	800V	900V
JB1/JB2/JB3/JB4M165-120	1200V	1300V
JB1/JB2/JB3/JB4M165-160	1600V	1700V
JB1/JB2/JB3/JB4M165-180	1800V	1900V
JB1/JB2/JB3/JB4M165-200	2000V	2100V

Maximum Ratings

Parameters	Symbol	Test Conditions	Values	Unit
State the average current	$I_{F(AV)}$	Single phase ,half wave 180°conduction Tc=85℃	165	A
Surge forward current	I_{FSM}	t=10mS T_J =45℃	6000	A
Maximum I^2t for fusing	I^2t	t=10mS T_J =45℃	180000	A^2s
Isolation Breakdown Voltage(R.M.S)	Visol	Ac.50H_Z；R.M.S；1min	2500	V
		Ac.50H_Z；R.M.S；1sec	3500	V
Operating Juntion Temperature	T_J		-40~+150	℃
Storage Temperature	Tstg		-40~+125	℃

Mounting Torque	Mt	To terminals(M6)	5±15%	Nm
	Ms	To heatsink(M6)	5±15%	
Module(Approximately)	Weight		160±10	g

Electrical Characteristics

Parameters	Symbol	Test Conditions	Values			Unit
			Min.	Typ.	Max.	
Maximum Forward voltage drop	V_{FM}	T_J=25℃ IF =165A	—	1.05	1.25	V
Maximum Repetitive Peak Reverse Current	I_{RRM}	T_J=25℃ V_{RD}=V_{RRM}	—	—	20	uA
		T_J=150℃ V_{RD}=V_{RRM}	—	—	5	mA

Thermal Characteristics

Parameters	Symbol	Test Conditions	Values	Unit
Maximum internal thermal resistance, junction to case per leg	$Rth_{(J-C)}$	Per diode	0.21	℃/W
Typical thermal resistance, case to heatsink per module	$Rth_{(C-S)}$	Module	0.05	℃/W

Performance Curves

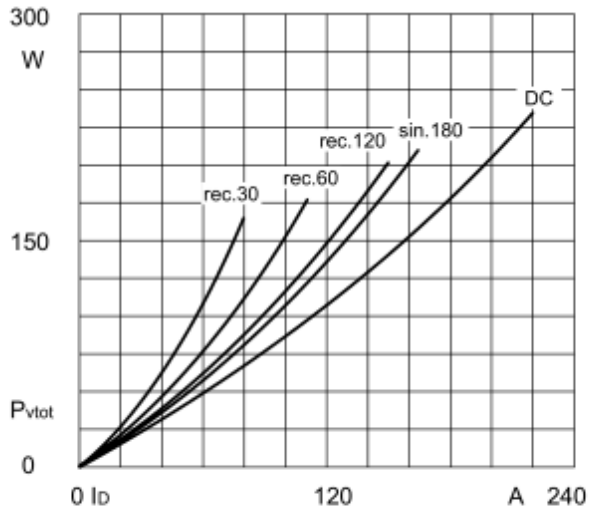


Fig1. Power dissipation

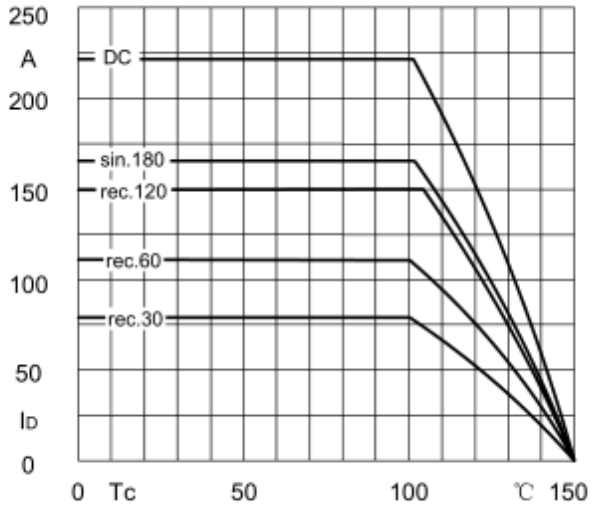


Fig2.Forward Current Derating Curve

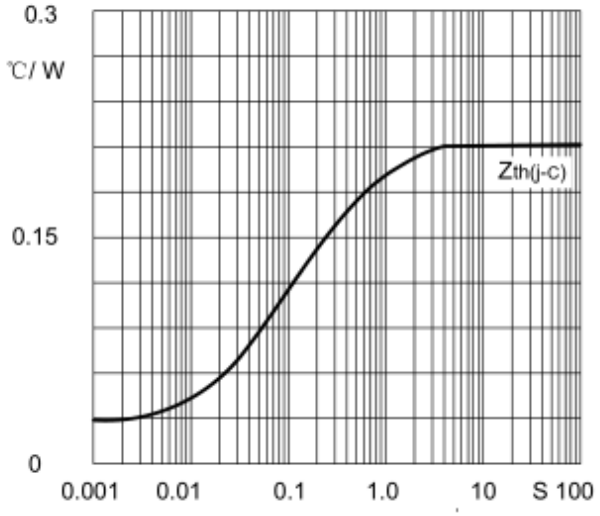


Fig3. Transient thermal impedance

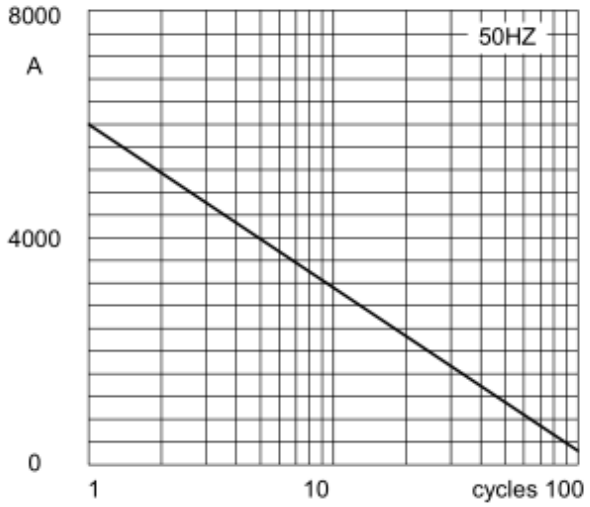


Fig4. Max Non-Repetitive Forward Surge Current

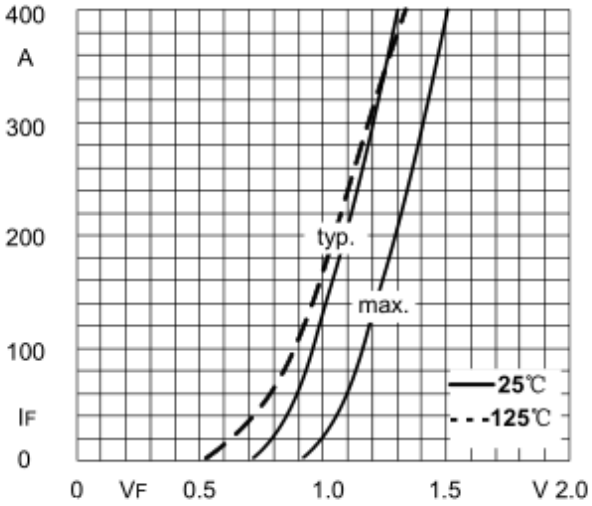


Fig5. Forward Characteristics

Ordering Information Tabel

Device code

J	B1M	165	-	160
①	②	③		④

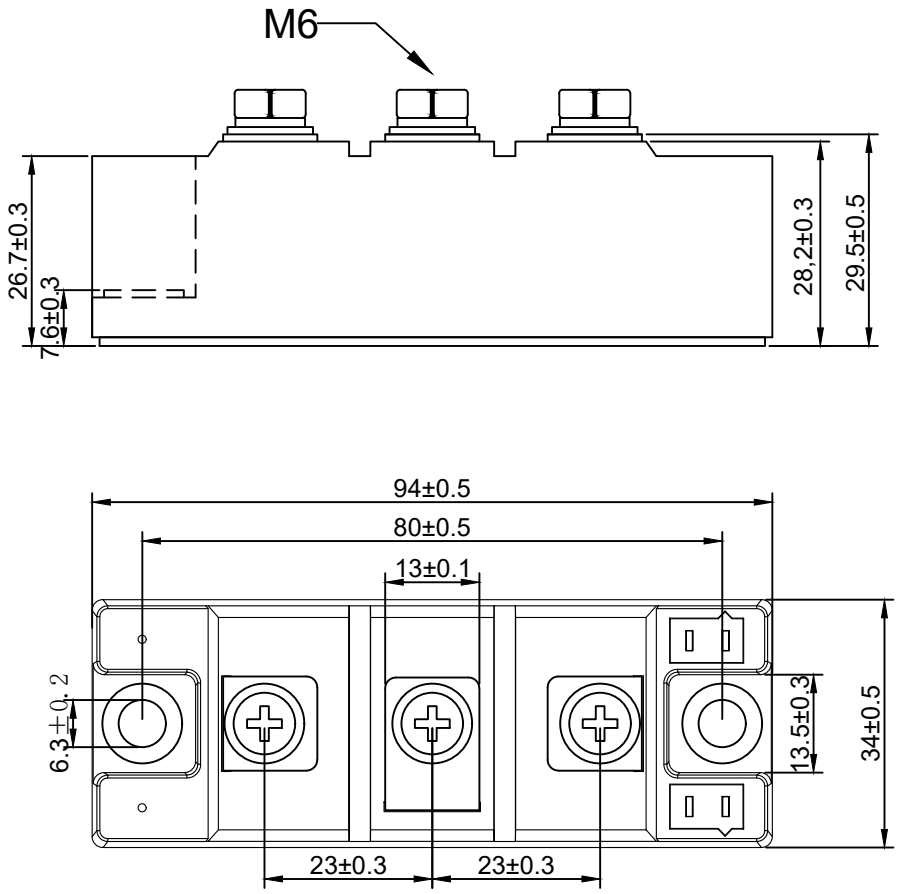
① JH's power module

② Circuit configuration, M-High Power Products Diode Modules

③ Maximum average forward current, A

④ Voltage code 1600v

B **Package Outline Information**



Dimensions in mm

Friendship Reminder

■ JiNan JingHeng（hereinafter referred to as JH） reserves the right to make changes to this document and its products and specifications at anytime without notice.

■ Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

■ JH makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does JH assume any liability for application assistance or customer product design.

■ JH does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

■ No license is granted by implication or otherwise under any intellectual property rights of JH.

■ JH's products are not authorized for use as critical components in life support devices or systems without express written approval of JH.