SEMICONDUCTOR

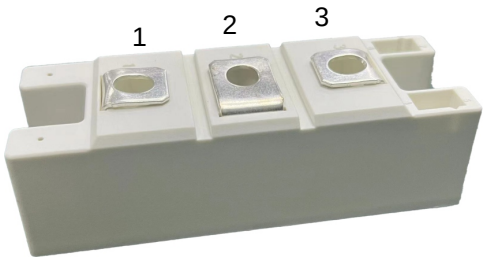
JB1/B2/B3/B5/B7F200-120

Fast Rectifier Module,200A,1200V

Features

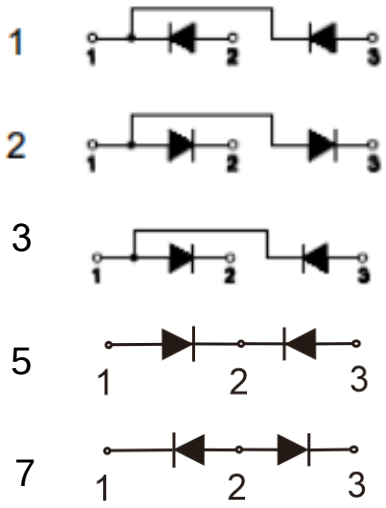
- Ultrafast Reverse Recovery Time
- Soft Reverse Recovery Characteristics
- Low Reverse Recovery Loss
- Low Forward Voltage
- High Surge Current Capability
- Low Inductance Package

B



Typical Applications

- Inversion Welder
- Uninterruptible Power Supply (UPS)
- Plating Power Supply
- Ultrasonic Cleaner and Welder
- Converter & Chopper
- Power Factor Correction (PFC) Circuit



ABSOLUTE MAXIMUM RATINGS

T_C=25°C unless otherwise specified

Parameters	Symbol	Test conditions	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}		1200	V
Maximum Continuous forward current, per diode	I_F	T_C=80 ℃	200	A
Single pulse forward current, per diode	I_{FSM}	T_j=45℃,t=10ms,50Hz,Sine	1800	A
RMS isolation voltage	Viso	AC,,t=1min	3000	V
Maximum junction temperature	T_J		150	℃
Maximum reverse recovery time	Trr	IF=0.5A,IR=1A,IRR=0.25A	200	nS
Storage temperture	T_{stg}		-40 ~ 125	℃
Power Dissipation	P_D		568	W
Thermal Resistance	$R_{\theta JC}$	Junction-to-Case	0.22	℃/W

ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

Parameters	Symbol	Test conditions	Min	Typ	Max	Units
Cathode to anodebreak down voltage	V_{BR}	I_R=100μA	1200	-	-	V
Forward voltage	V_F	I_F=200A T_J=25℃		1.7	2.0	
		I_F=200A T_J=125℃		-	1.9	
Reverse leakage current	I_R	V_R=VRrated T_J=25℃		-	20	uA
		V_R=VRrated T_J=150℃		-	10	mA

FIG1-TYPICAL FORWARD CHARACTERISTICS

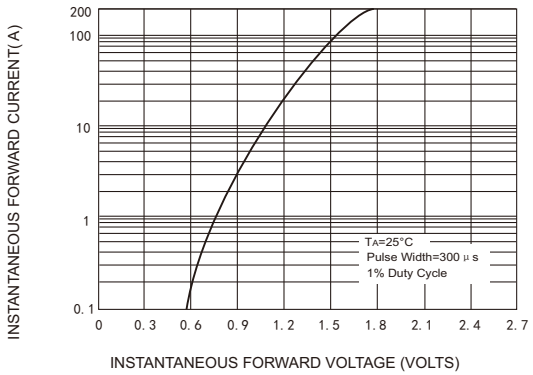
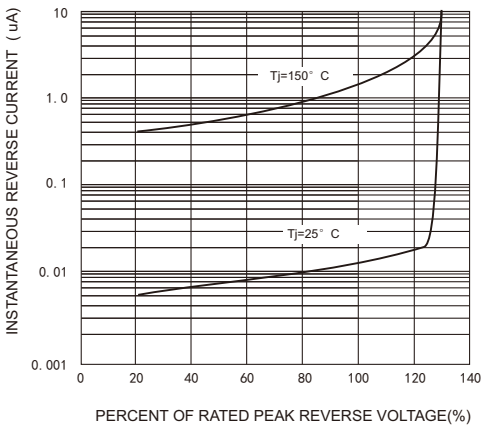
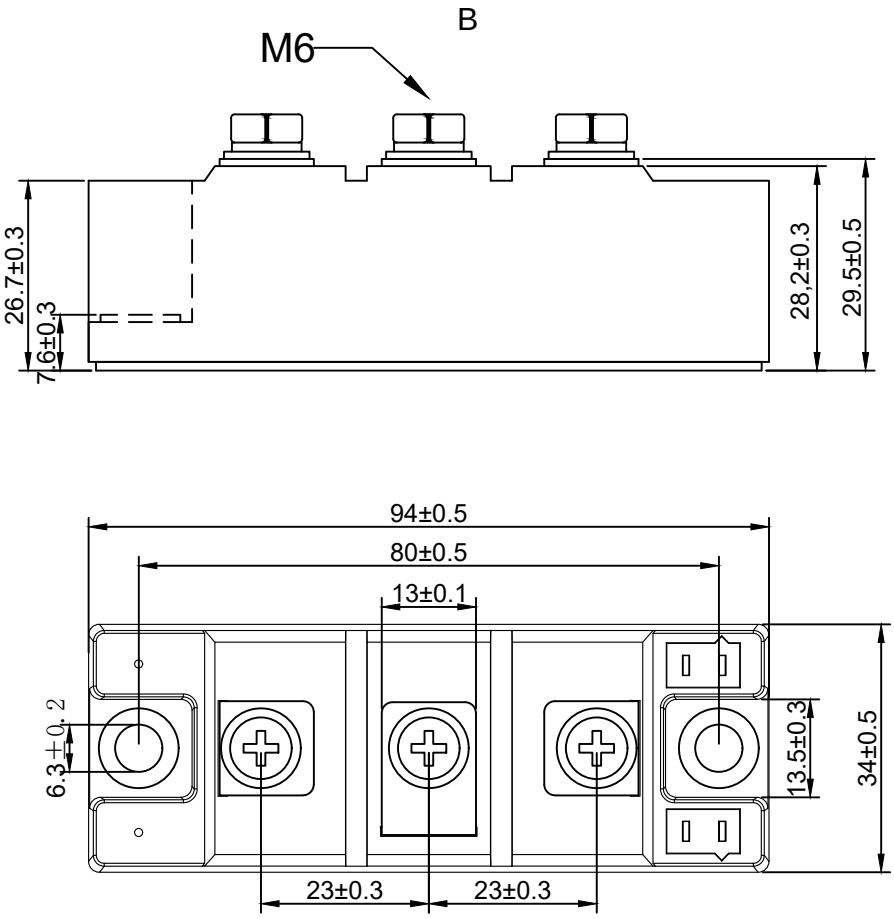


FIG.2-TYPICAL REVERSE CHARACTERISTICS



Package Outline Information



Dimensions in mm

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