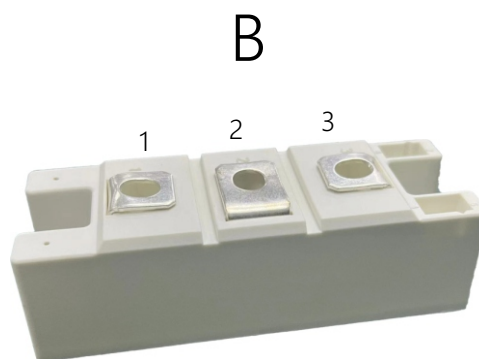


FEATURES

- Ultrafast Reverse Recovery Time
- Low Forward Voltage
- High surge capability
- Component in accordance to RoHS 2015/863/EU



MECHANICAL DATA

- Case: B
- Molding compound meets UL94V-0 flammability rating
- Polarity: As marked

TYPICAL APPLICATIONS

- Inversion Welder
- Uninterruptible Power Supply (UPS)
- Plating Power Supply
- Welders
- Converter & Chopper

Circuit



ABSOLUTE MAXIMUM RATINGS

Parameters	Symbol	Test conditions	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}		600	V
Maximum Continuous forward current, per diode	I_F	$T_c=110^{\circ}\text{C}$	300	A
Single pulse forward current, per diode	I_{FSM}	1/2 Cycle, 60Hz, Sine	3200	A
RMS isolation voltage	V_{iso}	AC, $t=1\text{min}$	3000	V
Maximum junction temperature	T_J		150	$^{\circ}\text{C}$
Storage temperature	T_{stg}		-55 ~ 125	$^{\circ}\text{C}$
Power Dissipation	P_D		890	W
Thermal Resistance	$R_{\theta JC}$	Junction-to-Case	0.14	$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS

Parameters	Symbol	Test conditions	Min	Typ	Max	Units
Cathode to anodebreak down voltage	VBR	$I_R=100\mu A$	600	-	-	V
Forward voltage	VF	$I_F=300A$ $T_J=25^{\circ}C$		1.15	1.65	
		$I_F=300A$ $T_J=125^{\circ}C$		-	1.45	
Reverse leakage current	IR	$V_R=600V$ $T_J=25^{\circ}C$		-	50	μA
		$V_R=600V$ $T_J=125^{\circ}C$		-	500	μA
Reverse Recovery Time	Trr	$I_F=1A$, $V_R=30V$, $dI_F/dt=-200A/\mu s$		55		ns

FIG.1-TYPRCAL FORWARD CURRENT DERATING CURVE

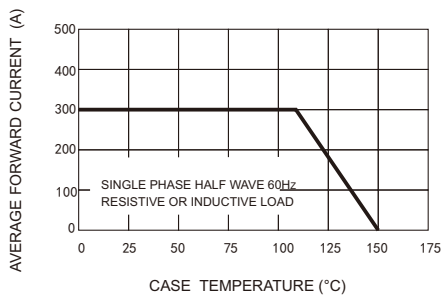


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

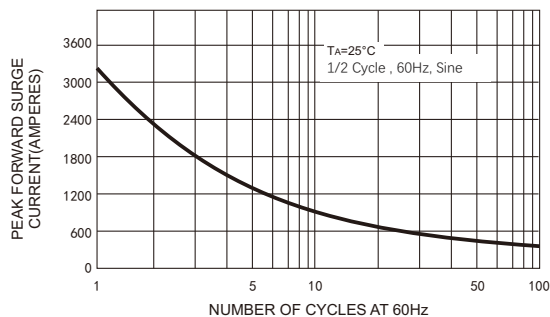


FIG4-TYPICAL FORWARD CHARACTERISTICS

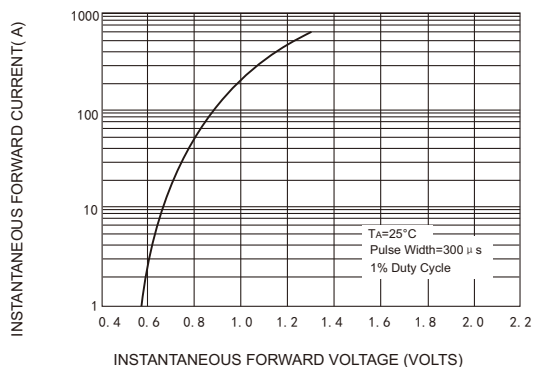
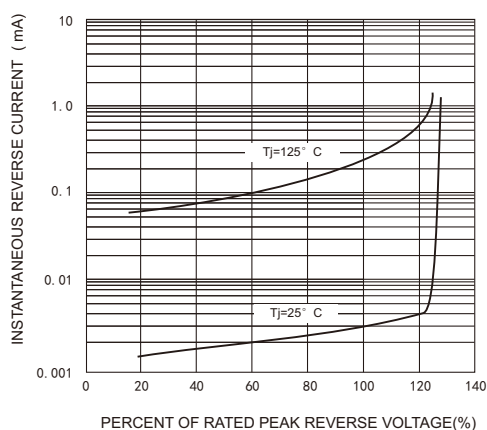
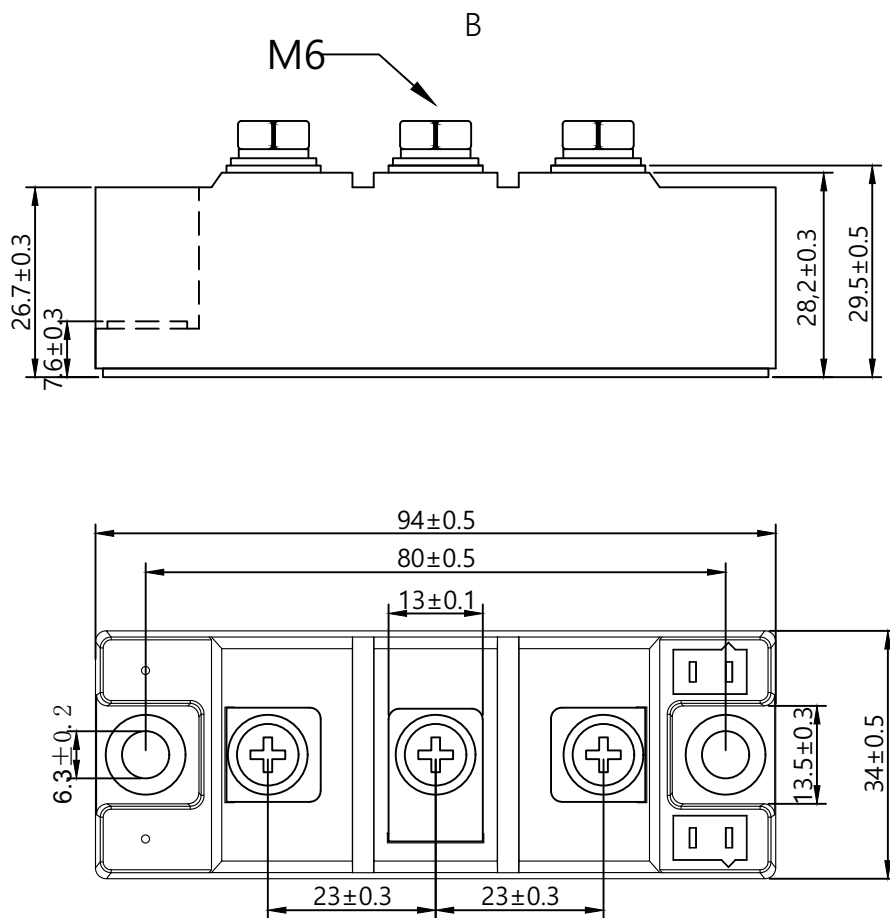


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Package Outline Information



Dimensions in mm

Ordering Information Tabel

J	B1U	300	-	60
①	②	③	④	

- ① JH' s power module
- ② Circuit configuration, U-Ultrafast Rectifier Module, Circuit-1
- ③ Maximum average forward current , 300A
- ④ Voltage code 600V

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