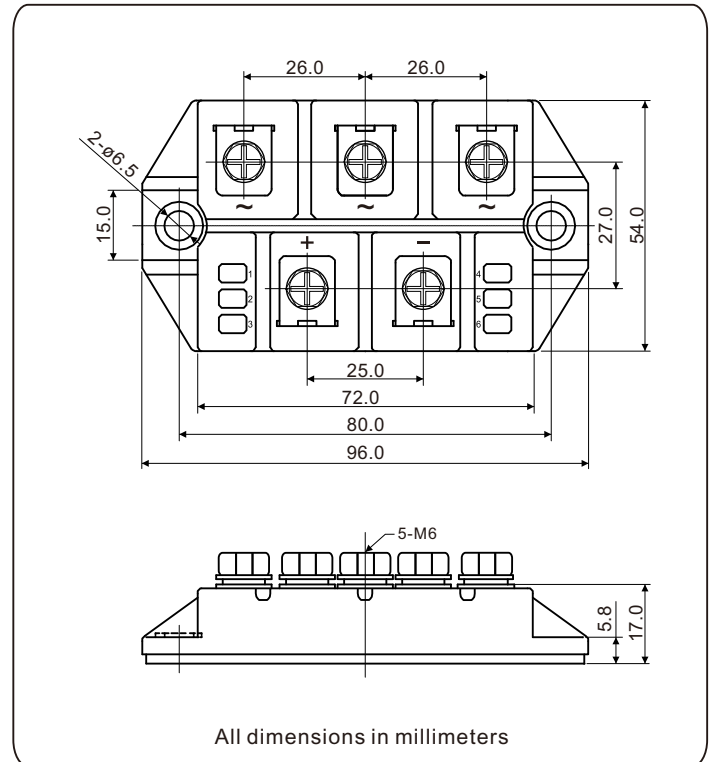


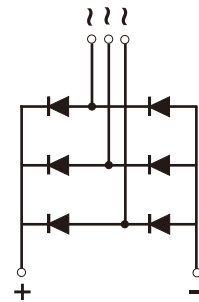
Glass Passivated Three-Phase Bridge Rectifier, 200A

MTP20008I Thru MTP20018I



FEATURES

- UL recognition file number E320098
- Typical IR less than 2.0 μA
- High surge current capability
- Low thermal resistance
- Compliant to RoHS
- Isolation voltage up to 2500V
- Glass passivated junctions



TYPICAL APPLICATIONS

General purpose use in AC/DC bridge full wave rectification for big power supply, field supply for DC motor, industrial automation applications.

ADVANTAGE

- International standard package
Epoxy meets UL 94 V-O flammability rating
- Small volume, light weight
- Weight: 220g (7.8 ozs)

PRIMARY CHARACTERISTICS

$I_{F(AV)}$	200A
V_{RRM}	800V to 1800V
I_{FSM}	2200A
I_R	20 μA
V_F	1.45V
$T_{J \text{ max.}}$	150°C

Nell High Power Products

MAJOR RATINGS AND CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)							
PARAMETER	SYMBOL	MTP200..I					UNIT
		08	10	12	16	18	
Maximum repetitive peak reverse voltage	V_{RRM}	800	1000	1200	1600	1800	V
Peak reverse non-repetitive voltage	V_{RSM}	900	1100	1300	1700	1900	V
Maximum DC blocking voltage	V_{DC}	800	1000	1200	1600	1800	V
Maximum average forward rectified output current	$I_{F(AV)}$	200					A
Peak forward surge current single sine-wave superimposed on rated load	I_{FSM}	2200					A
Rating (non-repetitive, for t greater than 1 ms and less than 10 ms) for fusing	I^2t	24.2					KA^2s
RMS isolation voltage from case to leads	V_{ISO}	2500					V
Operating junction storage temperature range	T_J	-40 to 150					$^\circ\text{C}$
Storage temperature range	T_{STG}	-40 to 125					$^\circ\text{C}$

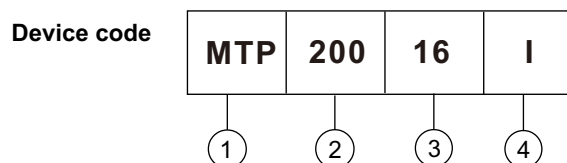
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)								
PARAMETER	TEST CONDITIONS	SYMBOL	MTP200..I					UNIT
			08	10	12	16	18	
Maximum instantaneous forward drop per diode	$I_F = 200\text{A}$	V_F	1.45					V
Maximum reverse DC current at rated DC blocking voltage per diod	$T_A = 25^\circ\text{C}$	I_R	20					μA
	$T_A = 150^\circ\text{C}$		6					mA

THERMAL AND MECHANICAC ($T_A = 25^\circ\text{C}$ unless otherwise noted)								
PARAMETER	TEST CONDITIONS	SYMBOL	MTP200..I					UNIT
			08	10	12	16	18	
Typical thermal resistance junction to case	Single-side heat dissipation, sine half wave	$R_{\theta JC}^{(1)}$	0.10					$^\circ\text{C}/\text{W}$
Mounting torque to heatsink M6 to terminal M6 $\pm 10\%$	A mounting compound is recommended and the torque should be rechecked after a period of 3 hours to allow for the spread of the compound.		5					Nm
			5					
Approximate weight			220					g

Notes

(1) With heatsink, single side heat dissipation, half sine wave.

Ordering Information Tabel



- 1 - Module type: "MTP" for 3 Φ Bridge
- 2 - $I_{F(AV)}$ rating : "200" for 200A
- 3 - Voltage code : code x 100 = V_{RRM}
- 4 - Package outline : "I" type package.

Fig.1 Forward current vs. Forward voltage

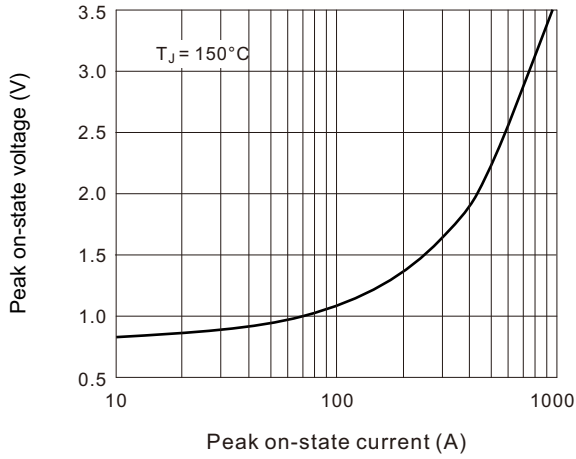


Fig.2 Thermal Impedance (junction to case)

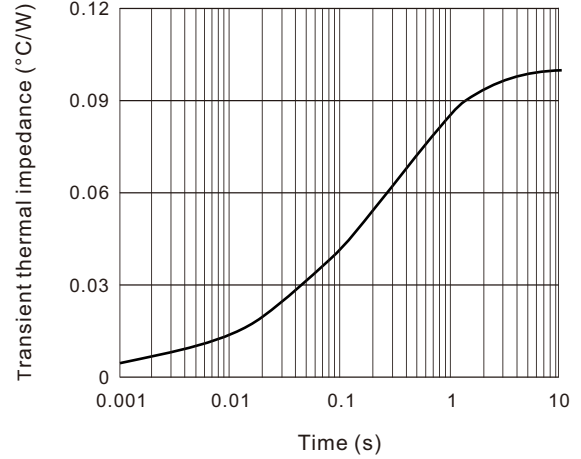


Fig.3 Power consumption vs. Average current

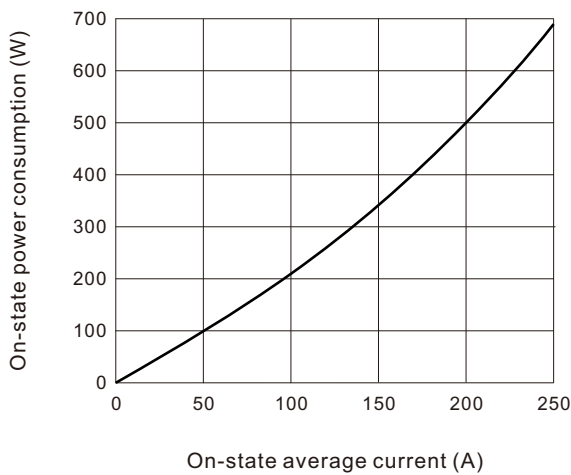


Fig.4 Case temperature vs. on-state average current

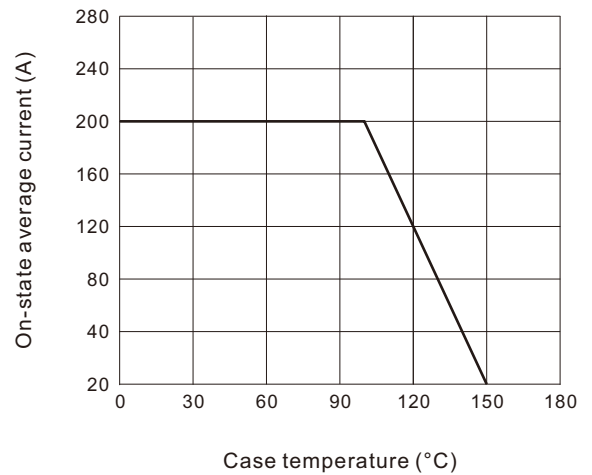


Fig.5 Forward surge current vs Cycle

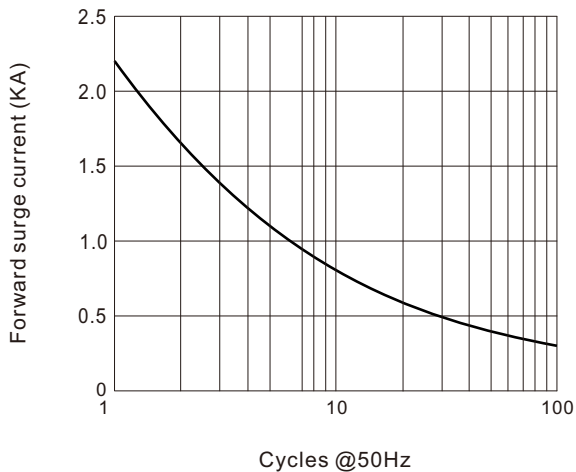


Fig.6 I²t characteristic

