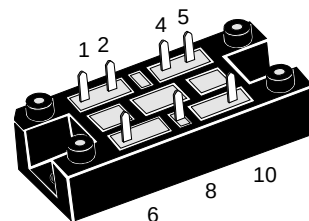
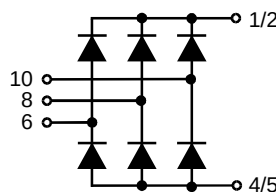


Three Phase Rectifier Bridge

$$I_{dAVM} = 82 \text{ A}$$

$$V_{RRM} = 800-1800 \text{ V}$$

V_{RSM} V	V_{RRM} V	Type
900	800	VUO 80-08NO1
1300	1200	VUO 80-12NO1
1500	1400	VUO 80-14NO1
1700	1600	VUO 80-16NO1
1900	1800	VUO 80-18NO1



Symbol	Test Conditions	Maximum Ratings
I_{dAV} I_{dAVM}	$T_K = 90^\circ\text{C}$, module module	82 A 82 A
I_{FSM}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$ $t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine	600 A 640 A
	$T_{VJ} = T_{VJM}$; $V_R = 0$ $t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine	520 A 555 A
I^2t	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$ $t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine	1800 A ² s 1720 A ² s
	$T_{VJ} = T_{VJM}$; $V_R = 0$ $t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine	1350 A ² s 1295 A ² s
T_{VJ} T_{VJM} T_{stg}		-40...+150 °C 150 °C -40...+130 °C
V_{ISOL}	50/60 Hz, RMS $I_{ISOL} \leq 1 \text{ mA}$ $t = 1 \text{ min}$ $t = 1 \text{ s}$	3000 V~ 3600 V~
M_d	Mounting torque (M5) (10-32UNF)	2 - 2.5 Nm 18-22 lb.in.
Weight	typ.	35 g

Features

- Package with DCB ceramic base plate
- Isolation voltage 3600 V~
- Planar passivated chips
- Blocking voltage up to 1800 V
- Low forward voltage drop
- Leads suitable for PC board soldering
- UL registered E72873

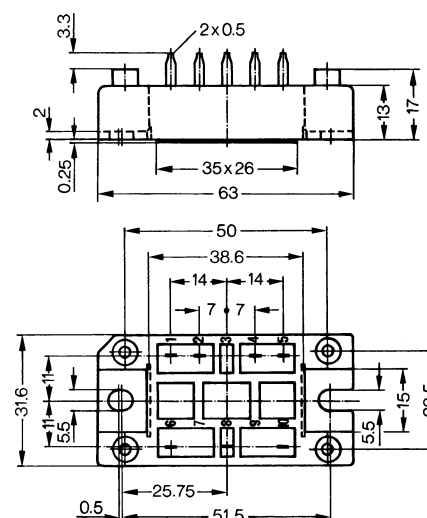
Applications

- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors

Advantages

- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling

Dimensions in mm (1 mm = 0.0394")



Data according to IEC 60747 and refer to a single diode unless otherwise stated.
IXYS reserves the right to change limits, test conditions and dimensions.

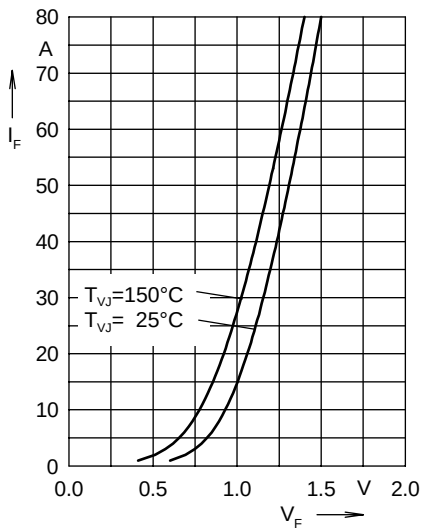


Fig. 1 Forward current versus voltage drop per diode

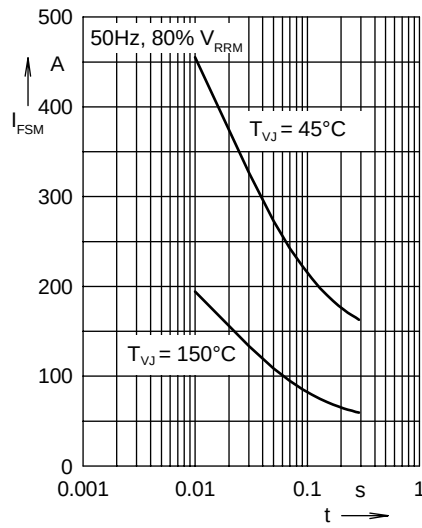


Fig. 2 Surge overload current

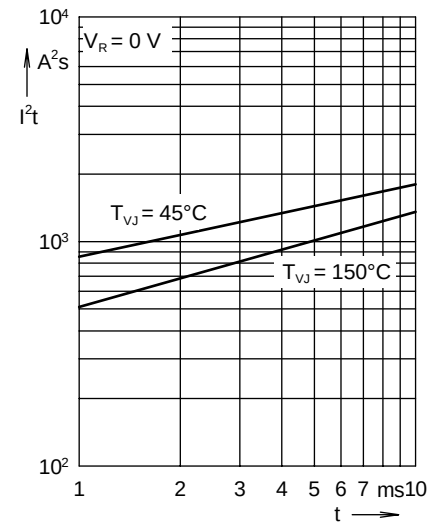


Fig. 3 I^2t versus time per diode

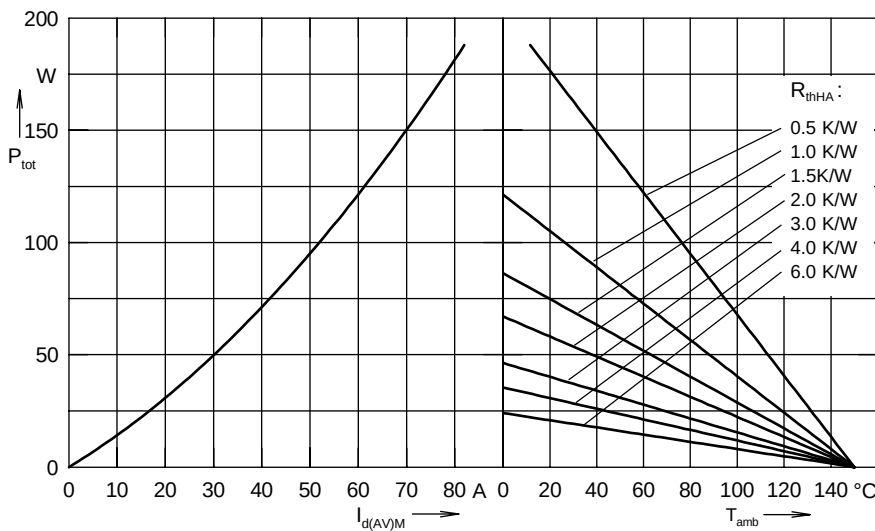


Fig. 4 Power dissipation versus direct output current and ambient temperature

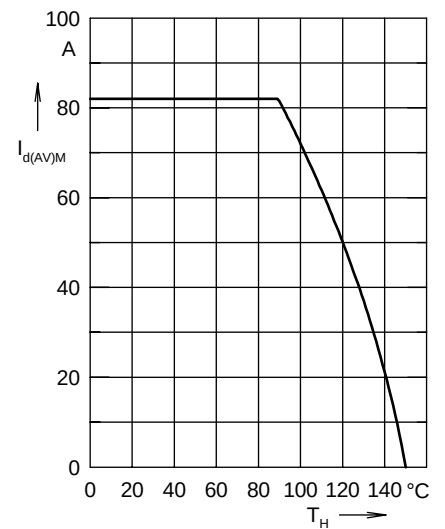


Fig. 5 Max. forward current versus heatsink temperature

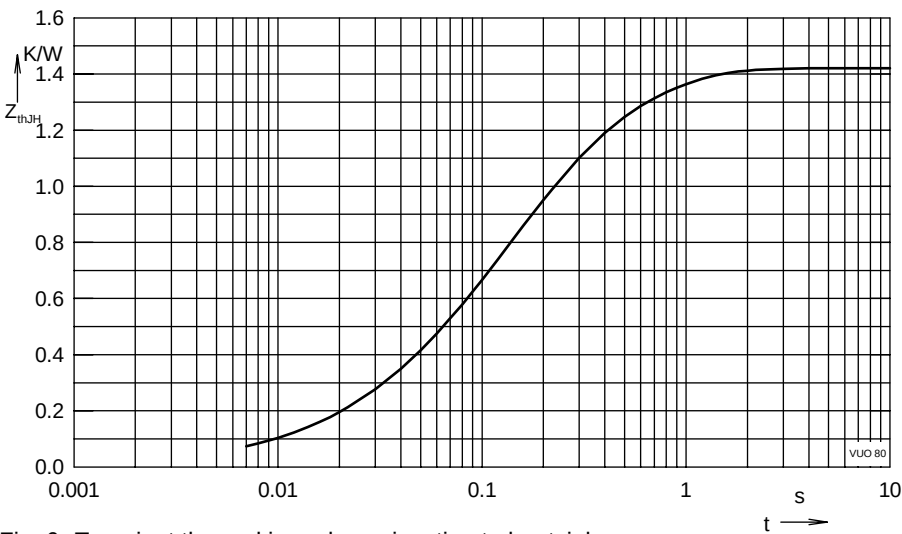


Fig. 6 Transient thermal impedance junction to heatsink

Constants for Z_{thJH} calculation:

i	R_{thi} (K/W)	t_i (s)
1	0.005	0.01
2	0.21	0.05
3	0.795	0.14
4	0.41	0.5

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