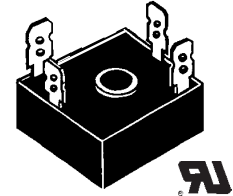
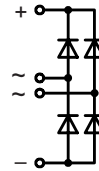


Single Phase Rectifier Bridge

$I_{dAVM} = 21 \text{ A}$
 $V_{RRM} = 1200-1800 \text{ V}$

V_{RSM} V	V_{RRM} V	Type
1200	1200	VBO 22-12NO8
1400	1400	VBO 22-14NO8
1600	1600	VBO 22-16NO8
1800	1800	VBO 22-18NO8



Symbol	Conditions	Maximum Ratings	
I_{dAV}	$T_C = 85^\circ\text{C}$, module	17	A
I_{dAVM}	$T_C = 63^\circ\text{C}$, module	21	A
I_{FSM}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$	t = 10 ms (50 Hz), sine	380 A
		t = 8.3 ms (60 Hz), sine	440 A
	$T_{VJ} = T_{VJM}$ $V_R = 0$	t = 10 ms (50 Hz), sine	360 A
		t = 8.3 ms (60 Hz), sine	400 A
I^2t	$T_{VJ} = 45^\circ\text{C}$ $V_R = 0$	t = 10 ms (50 Hz), sine	725 A ² s
		t = 8.3 ms (60 Hz), sine	800 A ² s
	$T_{VJ} = T_{VJM}$ $V_R = 0$	t = 10 ms (50 Hz), sine	650 A ² s
		t = 8.3 ms (60 Hz), sine	650 A ² s
T_{VJ}		-40...+150	°C
T_{VJM}		150	°C
T_{stg}		-40...+150	°C
V_{ISOL}	50/60 Hz, RMS $I_{ISOL} \leq 1 \text{ mA}$	t = 1 min	2500 V~
		t = 1 s	3000 V~
M_d	Mounting torque (M5) (10-32 UNF)	2 ±10%	Nm
		18 ±10%	lb.in.
Weight	typ.	22	g
Symbol	Conditions	Characteristic Values	
I_R	$T_{VJ} = 25^\circ\text{C}$; $T_{VJ} = T_{VJM}$	$V_R = V_{RRM}$	≤ 0.3 mA
		$V_R = V_{RRM}$	≤ 5.0 mA
V_F	$I_F = 150 \text{ A}$; $T_{VJ} = 25^\circ\text{C}$		≤ 2.2 V
V_{T0}	For power-loss calculations only	0.85	V
r_T		12	mΩ
R_{thJC}	per diode; DC current	8.2	K/W
	per module	2.05	K/W
R_{thJK}	per diode; DC current	9.4	K/W
	per module	2.35	K/W
d_S	Creeping distance on surface	12.7	mm
d_A	Creepage distance in air	9.4	mm
a	Max. allowable acceleration	50	m/s ²

Features

- Package with ¼" fast-on terminals
- Isolation voltage 3000 V~
- Planar passivated chips
- Blocking voltage up to 1800 V
- Low forward voltage drop
- UL registered E 72873

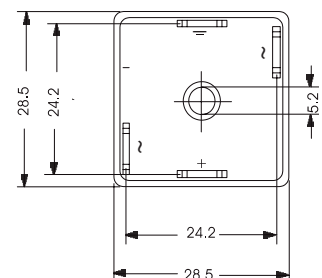
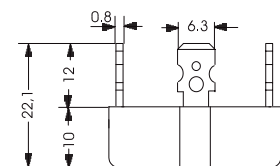
Applications

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

Advantages

- Easy to mount with one screw
- 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.

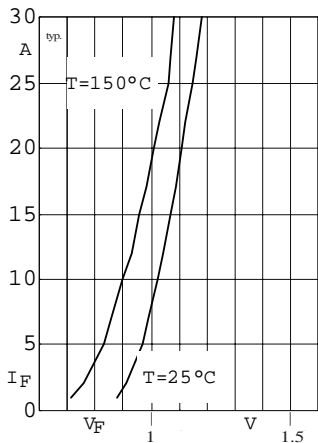


Fig. 1 Forward current versus voltage drop per diode

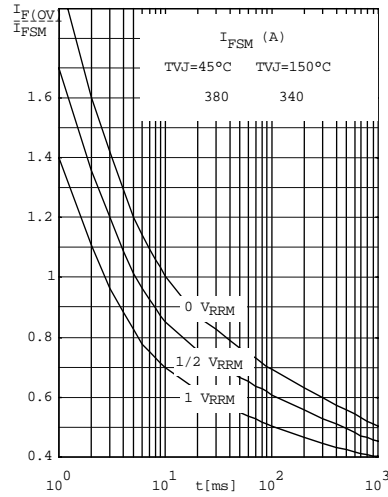


Fig. 2 Surge overload current per diode
 I_{FSM} : Crest value. t : duration

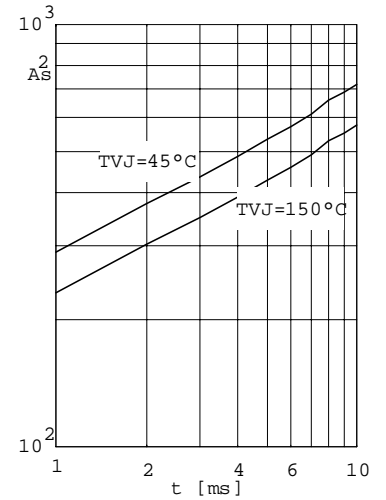


Fig. 3 $\int i^2 dt$ versus time (1-10ms) per diode or thyristor

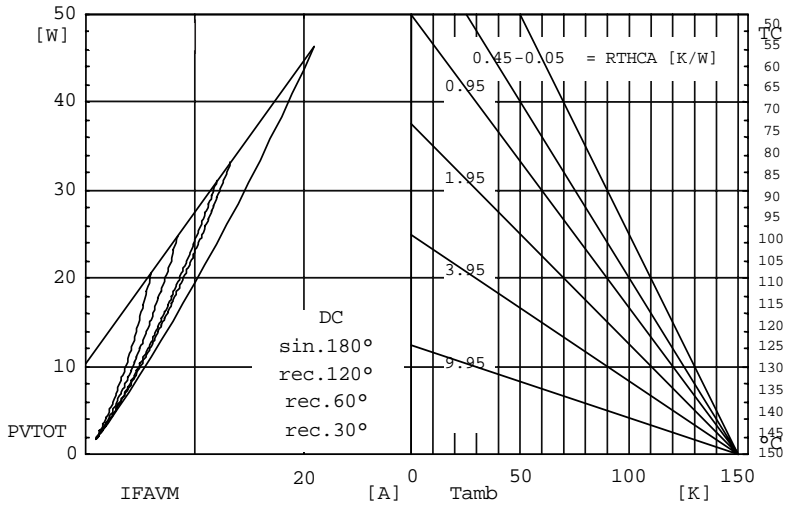


Fig. 4 Power dissipation versus direct output current and ambient temperature

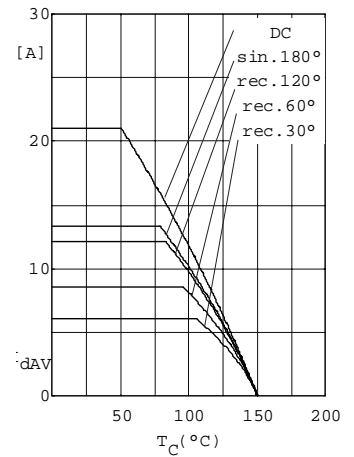


Fig.5 Maximum forward current at case temperature

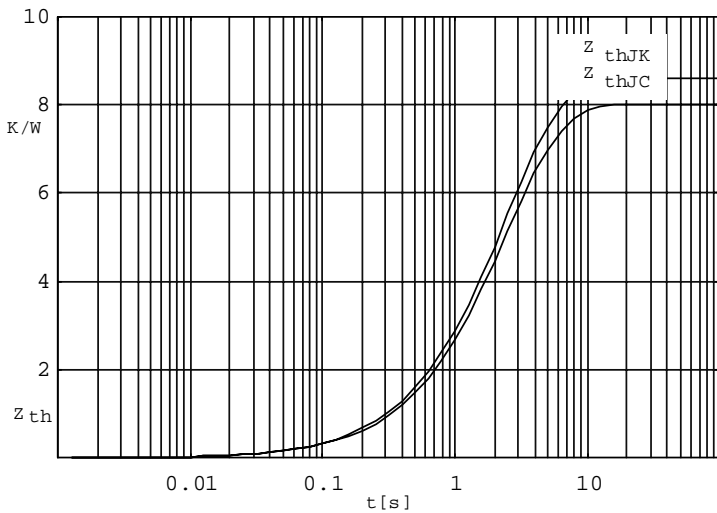


Fig. 6 Transient thermal impedance per diode or thyristor, calculated