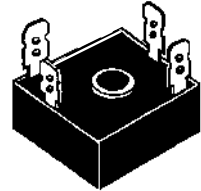
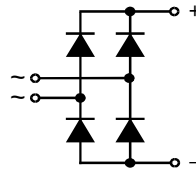


Single Phase Rectifier Bridge

$$I_{dAVM} = 30 \text{ A}$$

$$V_{RRM} = 1200-1800 \text{ V}$$

V_{RSM} V	V_{RRM} V	Type
1200	1200	VBO 36-12NO8
1400	1400	VBO 36-14NO8
1600	1600	VBO 36-16NO8
1800	1800	VBO 36-18NO8



Symbol	Test Conditions	Maximum Ratings
I_{dAV}	$T_C = 85^\circ\text{C}$, module	23 A
I_{dAVM}	$T_C = 62^\circ\text{C}$, module	30 A
I_{FSM}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine 550 A
		$t = 8.3 \text{ ms}$ (60 Hz), sine 600 A
	$T_{VJ} = T_{VJM}$	$t = 10 \text{ ms}$ (50 Hz), sine 500 A
	$V_R = 0$	$t = 8.3 \text{ ms}$ (60 Hz), sine 550 A
I^2t	$T_{VJ} = 45^\circ\text{C}$	$t = 10 \text{ ms}$ (50 Hz), sine 1520 A ² s
	$V_R = 0$	$t = 8.3 \text{ ms}$ (60 Hz), sine 1520 A ² s
	$T_{VJ} = T_{VJM}$	$t = 10 \text{ ms}$ (50 Hz), sine 1250 A ² s
	$V_R = 0$	$t = 8.3 \text{ ms}$ (60 Hz), sine 1250 A ² s
T_{VJ}		-40...+150 °C
T_{VJM}		150 °C
T_{stg}		-40...+150 °C
V_{ISOL}	50/60 Hz, RMS	$t = 1 \text{ min}$ 2500 V~
	$I_{ISOL} \leq 1 \text{ mA}$	$t = 1 \text{ s}$ 3000 V~
M_d	Mounting torque (M5) (10-32 UNF)	$2 \pm 10 \%$ Nm
		$18 \pm 10 \%$ lb.in.
Weight	typ.	22 g

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

Symbol	Test Conditions	Characteristic Values
I_R	$T_{VJ} = 25^\circ\text{C}$;	$V_R = V_{RRM}$ $\leq 0.3 \text{ mA}$
	$T_{VJ} = T_{VJM}$;	$V_R = V_{RRM}$ $\leq 2.0 \text{ mA}$
V_F	$I_F = 150 \text{ A}$;	$T_{VJ} = 25^\circ\text{C}$ $\leq 1.7 \text{ V}$
V_{T0}	For power-loss calculations only	
r_T		5.8 mΩ
R_{thJC}	per diode; DC current	6.2 K/W
	per module	1.55 K/W
R_{thJK}	per diode; DC current	7.4 K/W
	per module	1.85 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

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.

Dimensions in mm (1 mm = 0.0394")

