

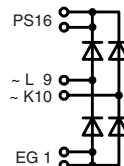
Single Phase Rectifier Bridge

in ECO-PAC 2

$I_{dAV} = 92 \text{ A}$
 $V_{RRM} = 800-1800 \text{ V}$

Preliminary data

V_{RSM} V	V_{RRM} V	Types
900	800	VBO 88-08NO7
1300	1200	VBO 88-12NO7
1500	1400	VBO 88-14NO7
1700	1600	VBO 88-16NO7
1900	1800	VBO 88-18NO7



Pin arrangement see outlines

Symbol	Conditions	Maximum Ratings	
I_{dAV} ①	$T_C = 100^\circ\text{C}$, module	92	A
I_{FSM}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine	900 A
		$t = 8.3 \text{ ms}$ (60 Hz), sine	990 A
	$T_{VJ} = T_{VJM}$ $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine	770 A
		$t = 8.3 \text{ ms}$ (60 Hz), sine	850 A
I^2t	$T_{VJ} = 45^\circ\text{C}$ $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine	4050 A ² s
		$t = 8.3 \text{ ms}$ (60 Hz), sine	4050 A ² s
	$T_{VJ} = T_{VJM}$ $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine	2950 A ² s
		$t = 8.3 \text{ ms}$ (60 Hz), sine	2950 A ² s
T_{VJ}		-40...+150	$^\circ\text{C}$
T_{VJM}		150	$^\circ\text{C}$
T_{stg}		-40...+125	$^\circ\text{C}$
V_{ISOL}	50/60 Hz, RMS $I_{ISOL} \leq 1 \text{ mA}$	$t = 1 \text{ min}$	2500 V~
		$t = 1 \text{ s}$	3000 V~
M_d	Mounting torque (M4)	1.5 - 2	Nm
		14 - 18	lb.in.
Weight	typ.	22	g

Features

- Package with DCB ceramic base plate
- Isolation voltage 3000 V~
- Planar passivated chips
- Low forward voltage drop
- Leads suitable for PC board soldering

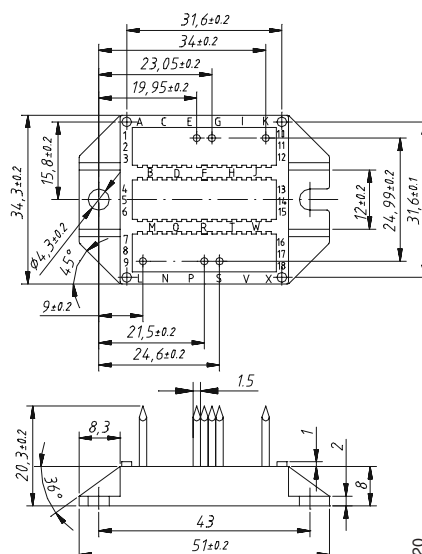
Applications

- 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 capability
- Small and light weight

Dimensions in mm (1 mm = 0.0394")



Symbol	Conditions	Characteristic Values	
I_R	$V_R = V_{RRM}$; $V_R = V_{RRM}$	$T_{VJ} = 25^\circ\text{C}$	$\leq 0.5 \text{ mA}$
		$T_{VJ} = T_{VJM}$	$\leq 5 \text{ mA}$
V_F	$I_F = 200 \text{ A}$; $T_{VJ} = 25^\circ\text{C}$	$\leq 1.75 \text{ V}$	
V_{TO}	For power-loss calculations only	0.8	V
r_T		4	m Ω
R_{thJC}	per diode; DC current per module	0.85	K/W
		0.212	K/W
R_{thJH}	per diode, DC current (typ.) per module (typ.)	1.15	K/W
		0.288	K/W
d_s	Creeping distance on surface	11.2	mm
d_A	Creepage distance in air	9.7	mm
a	Max. allowable acceleration	50	m/s ²

Data according to IEC 60747 refer to a single diode unless otherwise stated
 ① for resistive load at bridge output.

IXYS reserves the right to change limits, test conditions and dimensions.