

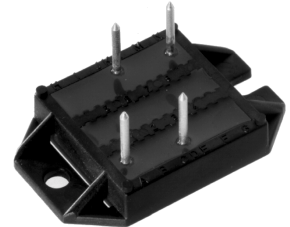
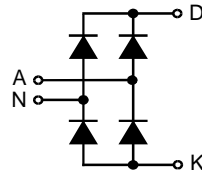
Single Phase Rectifier Bridge

$$I_{dAVM} = 21 \text{ A}$$

$$V_{RRM} = 600-1200 \text{ V}$$

Preliminary data

V_{RSM} V	V_{RRM} V	Type
700	600	VBO 21-06NO7
900	800	VBO 21-08NO7
1300	1200	VBO 21-12NO7



Symbol	Test Conditions		Maximum Ratings	
I _{dAV} ①	T _C = 100°C, module		21	A
I _{FSM}	T _{VJ} = 45°C; V _R = 0	t = 10 ms (50 Hz), sine	100	A
		t = 8.3 ms (60 Hz), sine	106	A
	T _{VJ} = T _{VJM} V _R = 0	t = 10 ms (50 Hz), sine	85	A
		t = 8.3 ms (60 Hz), sine	90	A
I ² t	T _{VJ} = 45°C V _R = 0	t = 10 ms (50 Hz), sine	50	A ² s
		t = 8.3 ms (60 Hz), sine	47	A ² s
	T _{VJ} = T _{VJM} V _R = 0	t = 10 ms (50 Hz), sine	36	A ² s
		t = 8.3 ms (60 Hz), sine	33	A ² s
T _{VJ}			-40...+150	°C
T _{VJM}			150	°C
T _{stg}			-40...+125	°C
V _{ISOL}	50/60 Hz, RMS	t = 1 min	2500	V~
	I _{ISOL} ≤ 1 mA	t = 1 s	3000	V~
M _d	Mounting torque (M4)		1.5 - 2	Nm
			14 - 18	lb.in.
Weight	typ.		18	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

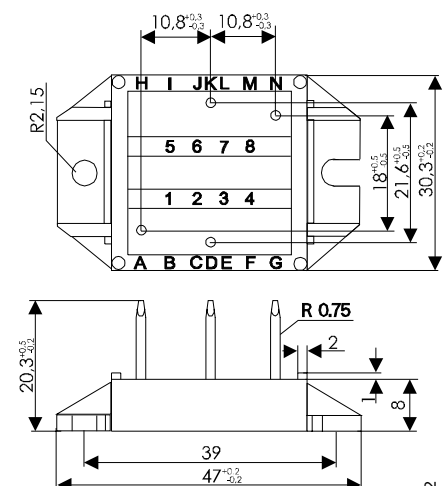
- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling capability
- Small and light weight

Symbol	Test Conditions	Characteristic Values
I_R	$V_R = V_{RRM}; T_{VJ} = 25^\circ\text{C}$	$\leq 0.3 \text{ mA}$
	$V_R = V_{RRM}; T_{VJ} = T_{VJM}$	$\leq 5 \text{ mA}$
V_F	$I_F = 7 \text{ A}; T_{VJ} = 25^\circ\text{C}$	$\leq 1.12 \text{ V}$
V_{T0}	For power-loss calculations only	0.8 V
r_T		40 mΩ
R_{thJC}	per diode; DC current	2.3 K/W
	per module	0.58 K/W
R_{thJH}	per diode, DC current	2.8 K/W
	per module	0.7 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.

Dimensions in mm (1 mm = 0.0394")



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