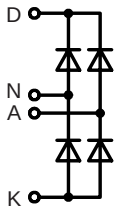
Single Phase Rectifier Bridge

I_{dAVM} = 21 A
V_{RRM} = 600-1200 V

Preliminary data

V_{RSM} V	V_{RRM} V	Type
700	600	VBO 19-06NO7
900	800	VBO 19-08NO7
1300	1200	VBO 19-12NO7





Symbol	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^2t	T_{VJ} = 45°C; V_R = 0	t = 10 ms (50 Hz), sine	50	A^2s
		t = 8.3 ms (60 Hz), sine	47	A^2s
	T_{VJ} = T_{VJM}; V_R = 0	t = 10 ms (50 Hz), sine	36	A^2s
		t = 8.3 ms (60 Hz), sine	33	A^2s
T_{VJ}			-40...+150	°C
T_{VJM}			150	°C
T_{stg}			-40...+125	°C
V_{ISOL}	50/60 Hz, RMS; I_{ISOL} ≤ 1 mA	t = 1 min	2500	V~
		t = 1 s	3000	V~
M_d	Mounting torque (M4)		1.5 - 2	Nm
			14 - 18	lb.in.
Weight	typ.		18	g

Symbol	Conditions		Characteristic Values		
I_R	V_R = V_{RRM};	T_{VJ} = 25°C	≤	0.3	mA
	V_R = V_{RRM};	T_{VJ} = T_{VJM}	≤	5	mA
V_F	I_F = 7 A;	T_{VJ} = 25°C	≤	1.12	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.

Features

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

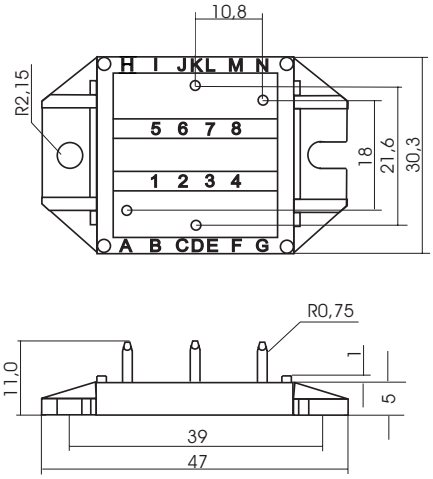
Applications

- 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")



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

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