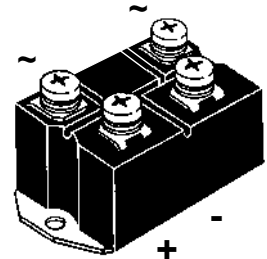
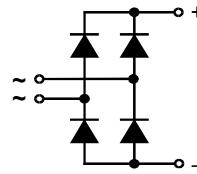


Single Phase Rectifier Bridge

$I_{dAV} = 52/72 \text{ A}$
 $V_{RRM} = 800-1800 \text{ V}$

V_{RSM} V	V_{RRM} V	Type	
800	800	VBO 52-08NO7	VBO 72-08NO7
1200	1200	VBO 52-12NO7	VBO 72-12NO7
1400	1400	VBO 52-14NO7	VBO 72-14NO7
1600	1600	VBO 52-16NO7	VBO 72-16NO7
1800	1800	VBO 52-18NO7	VBO 72-18NO7



Symbol	Test Conditions	Maximum Ratings			
		VBO 52	VBO 72		
I_{dAV}	$T_C = 100^\circ\text{C}$, module	52	72	A	
I_{dAV}	$T_A = 45^\circ\text{C}$ ($R_{thCA} = 0.6 \text{ K/W}$), module	41	49	A	
I_{FSM}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	550 600	750 820	A A
	$T_{VJ} = T_{VJM}$ $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	500 550	670 740	A A
I^2t	$T_{VJ} = 45^\circ\text{C}$ $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	1520 1520	2800 2800	A^2s A^2s
	$T_{VJ} = T_{VJM}$ $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	1250 1250	2250 2250	A^2s A^2s
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	t = 1 min	2500	V~	
	$I_{ISOL} \leq 1 \text{ mA}$	t = 1 s	3000	V~	
M_d	Mounting torque (M5)		5 ± 15 %	Nm	
	Terminal connection torque (M5)		5 ± 15 %	Nm	
Weight	typ.		160	g	

Features

- Package with screw terminals
- Isolation voltage 3000 V~
- Planar passivated chips
- Blocking voltage up to 1800 V
- Low forward voltage drop
- UL applied

Applications

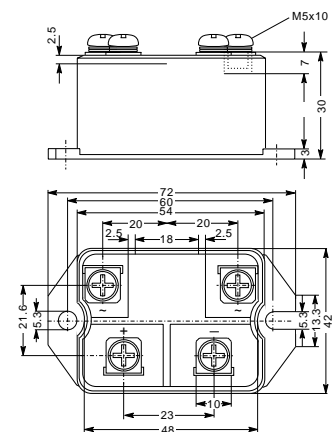
- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors

Advantages

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

Symbol	Test Conditions	Characteristic Values		
		VBO 52	VBO 72	
I_R	$V_R = V_{RRM}$; $T_{VJ} = 25^\circ\text{C}$	≤ 0.3	0.3	mA
	$V_R = V_{RRM}$; $T_{VJ} = T_{VJM}$	≤ 5	5	mA
V_F	$I_F = 150 \text{ A}$; $T_{VJ} = 25^\circ\text{C}$	≤ 1.8	1.6	V
V_{T0}	For power-loss calculations only	0.8	0.8	V
r_T	$T_{VJ} = T_{VJM}$	8	5	mΩ
R_{thJC}	per diode	1.45	1.1	K/W
	per module	0.36	0.28	K/W
R_{thJK}	per diode	1.87	1.52	K/W
	per module	0.47	0.38	K/W
d_s	Creeping distance on surface	10	10	mm
d_A	Creepage distance in air	9.4	9.4	mm
a	Max. allowable acceleration	50	50	m/s^2

Dimensions in mm (1 mm = 0.0394")



Data according to IEC 60747 refer to a single diode unless otherwise stated.
 IXYS reserves the right to change limits, test conditions and dimensions.