



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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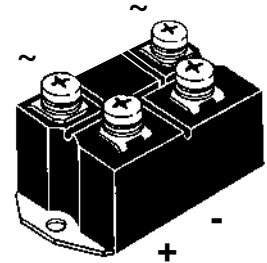
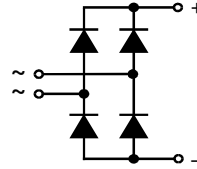
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Single Phase Rectifier Bridge

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

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}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine	550	750	A
		$t = 8.3 \text{ ms}$ (60 Hz), sine	600	820	A
I^2t	$T_{VJ} = T_{VJM}$ $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine	500	670	A
		$t = 8.3 \text{ ms}$ (60 Hz), sine	550	740	A
I^2t	$T_{VJ} = 45^\circ\text{C}$ $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine	1520	2800	A ² s
		$t = 8.3 \text{ ms}$ (60 Hz), sine	1520	2800	A ² s
I^2t	$T_{VJ} = T_{VJM}$ $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine	1250	2250	A ² s
		$t = 8.3 \text{ ms}$ (60 Hz), sine	1250	2250	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 (M5)	$5 \pm 15 \%$		Nm	
	Terminal connection torque (M5)	$5 \pm 15 \%$		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

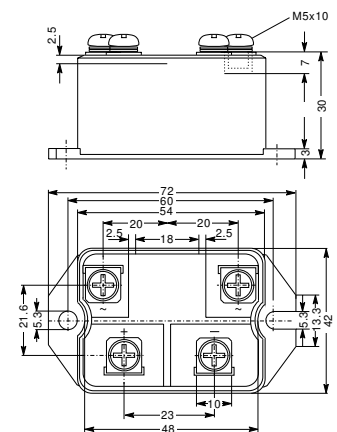
- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors

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	m Ω
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	mm
d_A	Creepage distance in air		9.4	mm
a	Max. allowable acceleration		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.