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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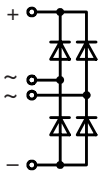
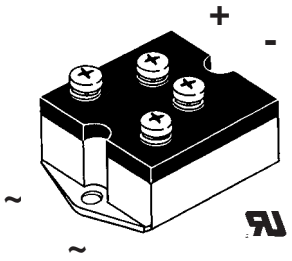
Single Phase Rectifier Bridge

I_{dAVM} = 50 A
V_{RRM} = 800-1800 V

V_{RSM} V	V_{RRM} V	Type
800	800	VBO 50-08NO7
1200	1200	VBO 50-12NO7
1400	1400	VBO 50-14NO7
1600	1600	VBO 50-16NO7
1800	1800	VBO 50-18NO7*

* delivery time on request





Symbol	Conditions		Maximum Ratings	
I_{dAVM}	T_C = 64°C, module		50	A
I_{FSM}	T_{VJ} = 45°C;	t = 10 ms (50 Hz), sine	750	A
	V_R = 0	t = 8.3 ms (60 Hz), sine	820	A
	T_{VJ} = T_{VJM}	t = 10 ms (50 Hz), sine	670	A
	V_R = 0	t = 8.3 ms (60 Hz), sine	740	A
I^2t	T_{VJ} = 45°C	t = 10 ms (50 Hz), sine	2800	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	2820	A^2s
	T_{VJ} = T_{VJM}	t = 10 ms (50 Hz), sine	2250	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	2300	A^2s
T_{VJ}			-40...+150	°C
T_{VJM}			150	°C
T_{stg}			-40...+150	°C
V_{ISOL}	50/60 Hz, RMS	t = 1 min	2500	V~
	$I_{ISOL} \leq$ 1 mA	t = 1 s	3000	V~
M_d	Mounting torque (M5)		5 ±15%	Nm
			44 ±15%	lb.in.
	Terminal connection torque (M5)		3 ±15%	Nm
			26 ±15%	lb.in.
Weight	typ.		260	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}	≤	10.0	mA
V_F	I_F = 150 A;	T_{VJ} = 25°C	≤	1.6	V
V_{T0}	For power-loss calculations only			0.85	V
r_T	T_{VJ} = T_{VJM}			8	mΩ
R_{thJC}	per diode; DC current			2.6	K/W
	per module			0.65	K/W
R_{thJK}	per diode; DC current			2.84	K/W
	per module			0.71	K/W

Data according to IEC 60747 refer to a single diode unless otherwise stated.

Features

- Package with screw terminals
- Isolation voltage 3000 V~
- Planar passivated chips
- Blocking voltage up to 1800 V
- Low forward voltage drop
- UL registered E 72873

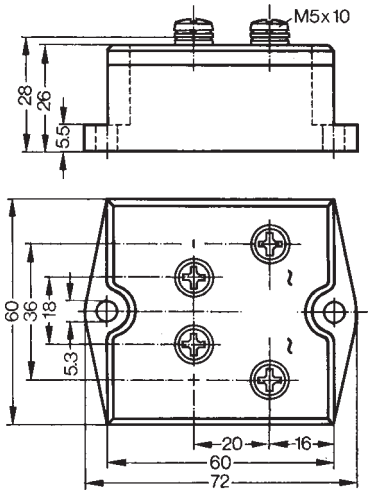
Applications

- 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

Dimensions in mm (1 mm = 0.0394")



420

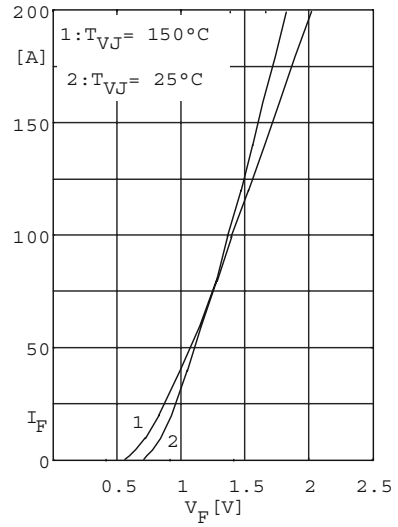


Fig. 1 Forward current versus voltage drop per diode

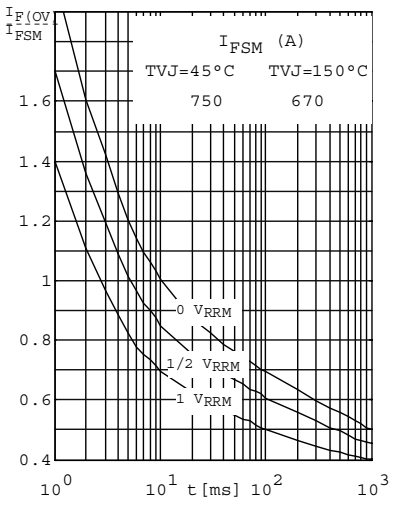


Fig. 2 Surge overload current per diode
I_{FSM}: Crest value. t: duration

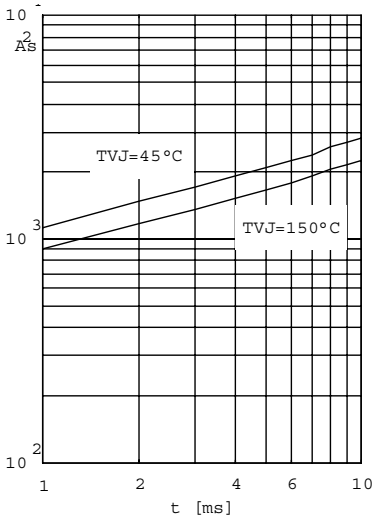


Fig. 3 ∫i²dt versus time (1-10ms) per diode or thyristor

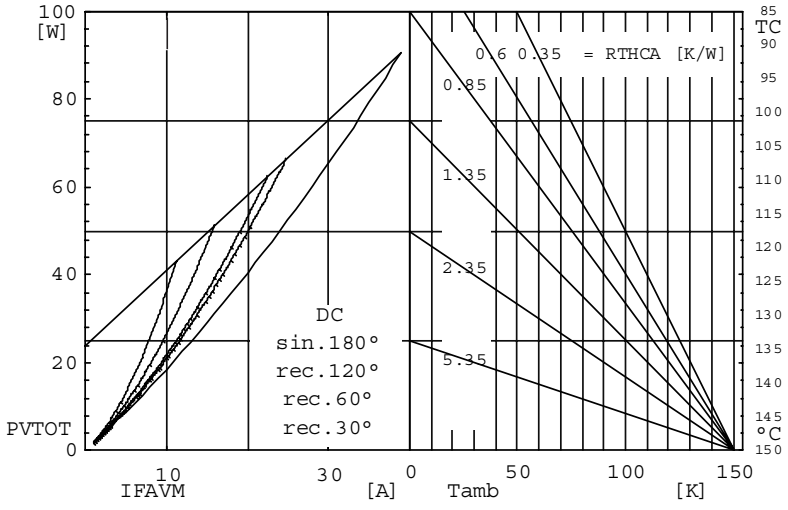


Fig. 4 Power dissipation versus direct output current and ambient temperature

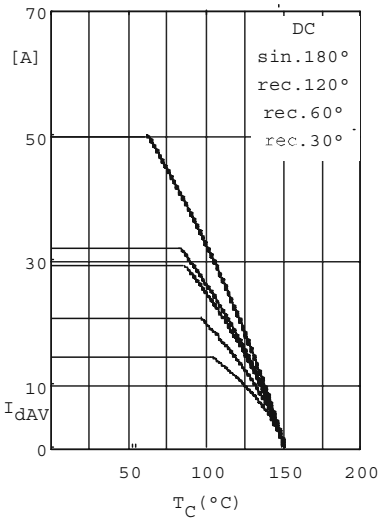


Fig.5 Maximum forward current at case temperature

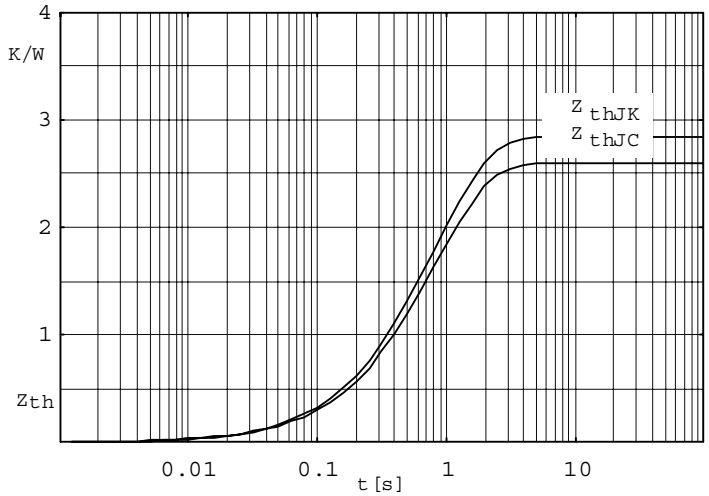


Fig. 6 Transient thermal impedance per diode or thyristor, calculated