



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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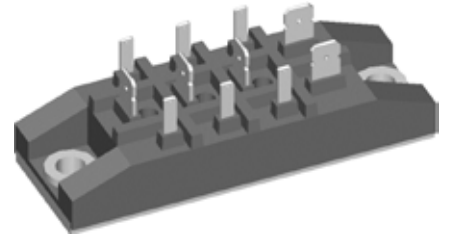
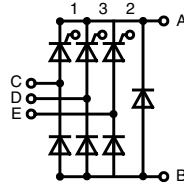
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Three Phase Rectifier Bridge

$I_{dAV} = 70 \text{ A}$
 $V_{RRM} = 1600 \text{ V}$

V_{RSM}	V_{RRM}	Type
V_{DSM}	V_{DRM}	
V	V	
1700	1600	VVZF 70-16io7



Symbol	Conditions	Maximum Ratings	
I_{dAV} ①	$T_C = 85^\circ\text{C}$, module	70	A
I_{dAVM} ①	module	70	A
I_{FRMS} , I_{TRMS}	per leg	36	A
I_{FSM} , I_{TSM}	$T_{VJ} = 45^\circ\text{C}$; $t = 10 \text{ ms}$ (50 Hz)	550	A
	$V_R = 0$; $t = 8.3 \text{ ms}$ (60 Hz)	600	A
	$T_{VJ} = T_{VJM}$; $t = 10 \text{ ms}$ (50 Hz)	500	A
	$V_R = 0$; $t = 8.3 \text{ ms}$ (60 Hz)	550	A
I^2t	$T_{VJ} = 45^\circ\text{C}$; $t = 10 \text{ ms}$ (50 Hz)	1520	A ² s
	$V_R = 0$; $t = 8.3 \text{ ms}$ (60 Hz)	1520	A ² s
	$T_{VJ} = T_{VJM}$; $t = 10 \text{ ms}$ (50 Hz)	1250	A ² s
	$V_R = 0$; $t = 8.3 \text{ ms}$ (60 Hz)	1250	A ² s
$(di/dt)_{cr}$	$T_{VJ} = 125^\circ\text{C}$ $f = 50 \text{ Hz}$; $t_p = 200 \mu\text{s}$	repetitive; $I_T = 50 \text{ A}$	150 A/ μs
	$V_D = \frac{2}{3} V_{DRM}$ $I_G = 0.3 \text{ A}$ $di_G/dt = 0.3 \text{ A}/\mu\text{s}$	non repetitive; $I_T = \frac{1}{2} I_{dAV}$	500 A/ μs
$(dv/dt)_{cr}$	$T_{VJ} = T_{VJM}$; $V_D = \frac{2}{3} V_{DRM}$ $R_{GK} = \infty$, method 1 (linear voltage rise)		1000 V/ μs
V_{RGM}		10	V
P_{GM}	$T_{VJ} = T_{VJM}$	$t_p = 30 \mu\text{s}$	10 W
	$I_T = I_{TAVM}$	$t_p = 500 \mu\text{s}$	5 W
		$t_p = 10 \mu\text{s}$	1 W
P_{GAVM}		0.5	W
T_{VJ}		-40...+125	°C
T_{VJM}		125	°C
T_{stg}		-40...+125	°C
V_{ISOL}	50/60 Hz, RMS	$t = 1 \text{ min}$	2500 V~
	$I_{ISOL} \leq 1 \text{ mA}$	$t = 1 \text{ s}$	3000 V~
M_d	Mounting torque (M5) (10-32 UNF)	5 ±15%	Nm
		44 ±15%	lb.in.
Weight	Typ.	100	g

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

Features

- Package with copper base plate
- Isolation voltage 3000 V~
- Planar passivated chips
- Low forward voltage drop
- ¼" fast-on power terminals

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 screw
- Space and weight savings
- Improved temperature & power cycling capability
- Small and light weight

Symbol	Conditions	Characteristic Values
$I_D; I_R$	$V_R = V_{RRM}; V_D = V_{DRM}$	$T_{VJ} = T_{VJM} \leq 5$ mA
V_T	$I_T = 80$ A	$T_{VJ} = 25^\circ\text{C} \leq 1.64$ V
V_{T0}	For power-loss calculations only	0.85 V
r_t		11 m Ω
V_{GT}	$V_D = 6$ V	$T_{VJ} = 25^\circ\text{C} \leq 1.5$ V $T_{VJ} = -40^\circ\text{C} \leq 1.6$ V
I_{GT}	$V_D = 6$ V	$T_{VJ} = 25^\circ\text{C} \leq 100$ mA $T_{VJ} = -40^\circ\text{C} \leq 200$ mA
V_{GD}	$V_D = \frac{2}{3}V_{DRM}$	$T_{VJ} = T_{VJM} \leq 0.2$ V
I_{GD}		≤ 5 mA
I_L	$t_p = 10$ μs $I_G = 0.45$ A; $di_G/dt = 0.45$ A/ μs	$T_{VJ} = 25^\circ\text{C} \leq 450$ mA
I_H	$V_D = 6$ V; $R_{GK} = \infty$	$T_{VJ} = 25^\circ\text{C} \leq 200$ mA
t_{gd}	$V_D = \frac{1}{2}V_{DRM}$ $I_G = 0.45$ A; $di_G/dt = 0.45$ A/ μs	$T_{VJ} = 25^\circ\text{C} \leq 2$ μs
t_q	$I_T = 20$ A; $t_p = 200$ μs $V_R = 100$ V; $di/dt = -10$ A/ μs $dv/dt = -15$ V/ μs ; $V_D = \frac{2}{3}V_{DRM}$	$T_{VJ} = 25^\circ\text{C} \leq 250$ μs
R_{thJC}	per thyristor / diode; DC per module	0.9 K/W 0.15 K/W
R_{thJH}	per thyristor / diode; DC per module	1.1 K/W 0.157 K/W
d_s	Creeping distance on surface	16.1 mm
d_A	Creepage distance in air	7.5 mm
a	Max. allowable acceleration	50 m/s ²

Dimensions in mm (1 mm = 0.0394")
