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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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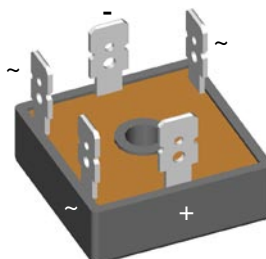
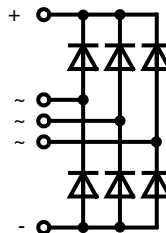


# Three Phase Rectifier Bridge with Semi Fast Diodes

$I_{dAV} = 18 \text{ A}$   
 $V_{RRM} = 1200-1600 \text{ V}$

Preliminary data

$V_{RSM}$ $V_{DSM}$ V	$V_{RRM}$ $V_{DRM}$ V	Type
1200	1200	VUO 18-12DT8
1400	1600	VUO 18-14DT8
1600	1800	VUO 18-16DT8



Symbol	Conditions	Maximum Ratings
$I_{dAV}$	$T_C = 85^\circ\text{C}$ , module	14 A
$I_{dAVM}$	$T_C = 63^\circ\text{C}$ , module	18 A
$I_{FSM}$	$T_{VJ} = 45^\circ\text{C}$ ; $t = 10 \text{ ms}$ (50 Hz)	300 A
	$V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz)	330 A
	$T_{VJ} = T_{VJM}$ ; $t = 10 \text{ ms}$ (50 Hz)	270 A
	$V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz)	300 A
$I^2t$	$T_{VJ} = 45^\circ\text{C}$ ; $t = 10 \text{ ms}$ (50 Hz)	450 A <sup>2</sup> s
	$V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz)	460 A <sup>2</sup> s
	$T_{VJ} = T_{VJM}$ ; $t = 10 \text{ ms}$ (50 Hz)	365 A <sup>2</sup> s
	$V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz)	380 A <sup>2</sup> s
$T_{VJ}$		-40...+150 °C
$T_{VJM}$		150 °C
$T_{stg}$		-40...+150 °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)	2 ±10% Nm
		18 ±10% lb.in.
Weight	Typ.	22 g

## Features

- Package with ¼" fast-on terminals
- Isolation voltage 3000 V~
- Planar passivated chips
- Blocking voltage up to 1600 V
- Low forward voltage drop
- UL registered E 72873

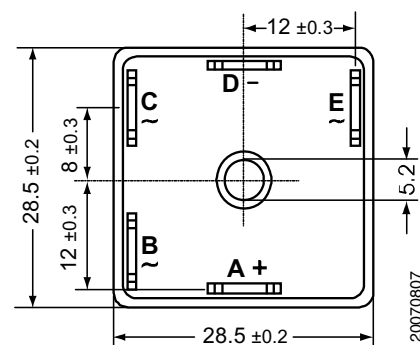
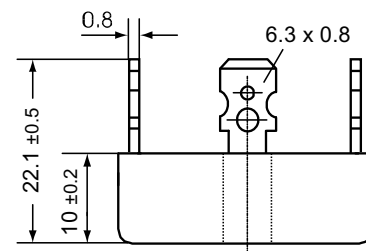
## Applications

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

## Advantages

- Easy to mount with one screw
- Space and weight savings
- Improved temperature & power cycling
- **Up to 10 dB lower EMI/RFI compared to standard rectifier**

## Dimensions in mm (1 mm = 0.0394")



Symbol	Conditions	Characteristic Values
$I_R$	$V_R = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = T_{VJM}$	0.3 mA
		5.0 mA
$V_F$	$I_F = 55 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$	1.85 V
$V_{T0}$	For power-loss calculations only	1.2 V
$r_t$		16 mΩ
$t_{rr}$	$I_C = 10 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$ $-di/dt = 10 \text{ A}/\mu\text{s}$ , $V_R = \frac{1}{2} V_{RRM}$	1.5 μs
$R_{thJC}$	per diode; 120° el.	9.30 K/W
	per module	1.55 K/W
$R_{thCH}$	per diode; 120° el.	10.20 K/W
	per module	1.70 K/W
$d_s$	Creeping distance on surface	12.7 mm
$d_A$	Creepage distance in air	9.4 mm
$a$	Max. allowable acceleration	50 m/s <sup>2</sup>

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

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