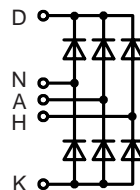


# Three Phase Rectifier Bridge

**$I_{dAV} = 28 \text{ A}$**   
 **$V_{RRM} = 600-1200 \text{ V}$**

Preliminary data

$V_{RSM}$ V	$V_{RRM}$ V	Type
700	600	VUO 27-06NO7
900	800	VUO 27-08NO7
1300	1200	VUO 27-12NO7



Symbol	Conditions	Maximum Ratings	
$I_{dAV}$ ①	$T_C = 100^\circ\text{C}$ , module	28	A
$I_{FSM}$	$T_{VJ} = 45^\circ\text{C}$ ; $t = 10 \text{ ms}$ (50 Hz), sine $V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz), sine	100	A
		106	A
	$T_{VJ} = T_{VJM}$ ; $t = 10 \text{ ms}$ (50 Hz), sine $V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz), sine	85	A
		90	A
$I^2t$	$T_{VJ} = 45^\circ\text{C}$ ; $t = 10 \text{ ms}$ (50 Hz), sine $V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz), sine	50	$\text{A}^2\text{s}$
		47	$\text{A}^2\text{s}$
	$T_{VJ} = T_{VJM}$ ; $t = 10 \text{ ms}$ (50 Hz), sine $V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz), sine	36	$\text{A}^2\text{s}$
		33	$\text{A}^2\text{s}$
$T_{VJ}$		-40...+150	$^\circ\text{C}$
$T_{VJM}$		150	$^\circ\text{C}$
$T_{stg}$		-40...+125	$^\circ\text{C}$
$V_{ISOL}$	50/60 Hz, RMS; $t = 1 \text{ min}$ $I_{ISOL} \leq 1 \text{ mA}$ ; $t = 1 \text{ s}$	2500	V~
		3000	V~
$M_d$	Mounting torque (M4)	1.5 - 2	Nm
		14 - 18	lb.in.
Weight	typ.	18	g

## Features

- Package with DCB ceramic base plate
- Isolation voltage 3000 V~
- Planar passivated chips
- Low forward voltage drop
- Leads suitable for PC board soldering

## 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 capability
- Small and light weight

Symbol	Conditions	Characteristic Values	
$I_R$	$V_R = V_{RRM}$ ; $T_{VJ} = 25^\circ\text{C}$ $V_R = V_{RRM}$ ; $T_{VJ} = T_{VJM}$	$\leq 0.3$	mA
		$\leq 5$	mA
$V_F$	$I_F = 7 \text{ A}$ ; $T_{VJ} = 25^\circ\text{C}$	$\leq 1.12$	V
$V_{T0}$	For power-loss calculations only	0.8	V
$r_T$		40	m $\Omega$
$R_{thJC}$	per diode; DC current per module	2.3	K/W
		0.39	K/W
$R_{thJH}$	per diode, DC current per module	2.8	K/W
		0.47	K/W
$d_s$	Creeping distance on surface	11.2	mm
$d_A$	Creepage distance in air	9.7	mm
$a$	Max. allowable acceleration	50	m/s <sup>2</sup>

Data according to IEC 60747 refer to a single diode unless otherwise stated  
 ① for resistive load at bridge output.

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

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

