

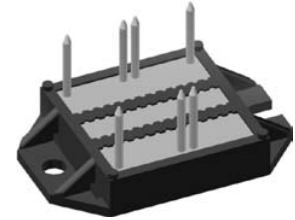
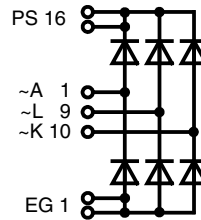
## Three Phase Rectifier Bridge in ECO-PAC 2

$$I_{dAV} = 117 \text{ A}$$

$$V_{RRM} = 800\text{-}1600 \text{ V}$$

### Preliminary data

$V_{RSM}$	$V_{RRM}$	Type
$V_{DSM}$	$V_{DRM}$	
V	V	
900	800	VUO 122-08NO7
1300	1200	VUO 122-12NO7
1500	1400	VUO 122-14NO7
1700	1600	VUO 122-16NO7



Symbol	Conditions	Maximum Ratings	
$I_{dAV}$ ①	$T_C = 100^\circ\text{C}$ , module	117	A
$I_{FSM}$	$T_{VJ} = 45^\circ\text{C}$ ; $t = 10 \text{ ms}$ (50 Hz) $V_R = 0$ $t = 8.3 \text{ ms}$ (60 Hz)	900	A
		990	A
	$T_{VJ} = T_{VJM}$ ; $t = 10 \text{ ms}$ (50 Hz) $V_R = 0$ $t = 8.3 \text{ ms}$ (60 Hz)	770	A
		850	A
$I^2t$	$T_{VJ} = 45^\circ\text{C}$ ; $t = 10 \text{ ms}$ (50 Hz) $V_R = 0$ $t = 8.3 \text{ ms}$ (60 Hz)	4050	A <sup>2</sup> s
		4050	A <sup>2</sup> s
	$T_{VJ} = T_{VJM}$ ; $t = 10 \text{ ms}$ (50 Hz) $V_R = 0$ $t = 8.3 \text{ ms}$ (60 Hz)	2950	A <sup>2</sup> s
		2950	A <sup>2</sup> s
$T_{VJ}$		-40...+150	°C
$T_{VJM}$		150	°C
$T_{stg}$		-40...+125	°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
Weight	Typ.	22	g

### Features

- Package with DCB ceramic base plate
- Isolation voltage 3000 V~
- Planar passivated chips
- Blocking voltage up to 1600 V
- 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

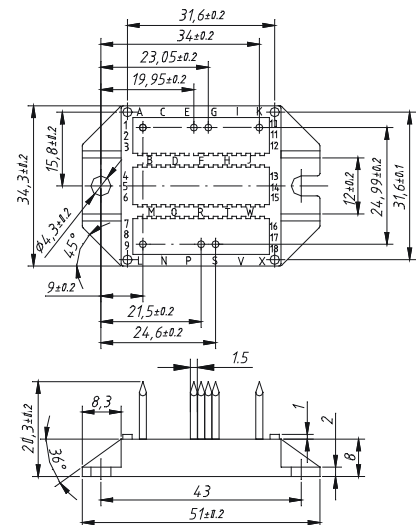
Symbol	Conditions	Characteristic Values	
$I_R$	$V_R = V_{RRM}$ $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = T_{VJM}$	$\leq 0.5$	mA
		$\leq 5$	mA
$V_F$	$I_F = 200 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$	$\leq 1.75$	V
$V_{T0}$	For power-loss calculations only	0.8	V
$r_T$		4	mΩ
$R_{thJC}$	per diode; DC current	0.85	K/W
	per module	0.142	K/W
$R_{thCH}$	per diode; DC current (typ.)	1.15	K/W
	per module (typ.)	0.192	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 and refer to a single diode unless otherwise stated.

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

© IXYS All rights reserved

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



20090317a