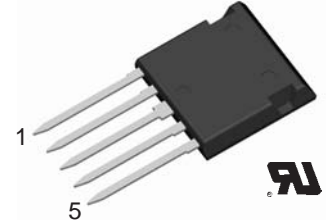
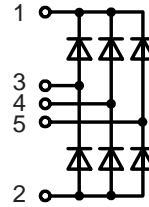


# Schottky Three Phase Rectifier Bridge

in ISOPLUS i4-PAC™

$$V_{RRM} = 45 \text{ V}$$

$$I_{D(AV)M} = 45 \text{ A}$$



## Rectifier Bridge

| Symbol       | Conditions   | Maximum Ratings |   |
|--------------|--|-----------------|---|
| $V_{RRM}$    |  | 45              | V |
| $I_{FAV}$    | $T_C = 90^\circ\text{C}$ ; sine $180^\circ$ (per diode)        | 20              | A |
| $I_{D(AV)M}$ | $T_C = 90^\circ\text{C}$ (bridge)                              | 45              | A |
| $I_{FSM}$    | $T_{VJ} = 25^\circ\text{C}$ ; $t = 10 \text{ ms}$ ; sine 50 Hz | 150             | A |
| $P_{tot}$    | $T_C = 25^\circ\text{C}$ (per diode)                           | 40              | W |

| Symbol     | Conditions   | Characteristic Values   |      |      |
|------------|--|---|------|------|
|            |  | $(T_{VJ} = 25^\circ\text{C}, \text{ unless otherwise specified})$ |      |      |
|            |  | min.  | typ. | max. |
| $V_F$      | $I_F = 15 \text{ A}$ ; $T_{VJ} = 25^\circ\text{C}$<br>$T_{VJ} = 125^\circ\text{C}$ | 0.55  | 0.65 | V    |
| $I_R$      | $V_R = V_{RRM}$ ; $T_{VJ} = 25^\circ\text{C}$<br>$T_{VJ} = 125^\circ\text{C}$      | 100   | 5    | mA   |
| $C_J$      | $V_R = 20 \text{ V}$   | 200   |      | pF   |
| $R_{thJC}$ | (per diode)  |   |      | 3.1  |

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

## Component

| Symbol     | Conditions                              | Maximum Ratings |                  |
|------------|---|-----------------|------------------|
| $T_{VJ}$   |   | -55...+150      | $^\circ\text{C}$ |
| $T_{stg}$  |   | -55...+125      | $^\circ\text{C}$ |
| $V_{ISOL}$ | $I_{ISOL} \leq 1 \text{ mA}$ ; 50/60 Hz | 2500            | V~               |
| $F_c$      | mounting force with clip                | 20...120        | N                |

| Symbol        | Conditions  | Characteristic Values |      |      |
|---------------|---|-----------------------|------|------|
|               |   | min.                  | typ. | max. |
| $C_P$         | coupling capacity between shorted pins and mounting tab in the case |                       | 40   | pF   |
| $R_{thCH}$    | with heatsink compound  |                       | 0.15 | KW   |
| $d_S, d_A$    | pin - pin   | 1.7                   |      | mm   |
| $d_S, d_A$    | pin - backside metal  | 5.5                   |      | mm   |
| <b>Weight</b> |   |                       | 9    | g    |

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

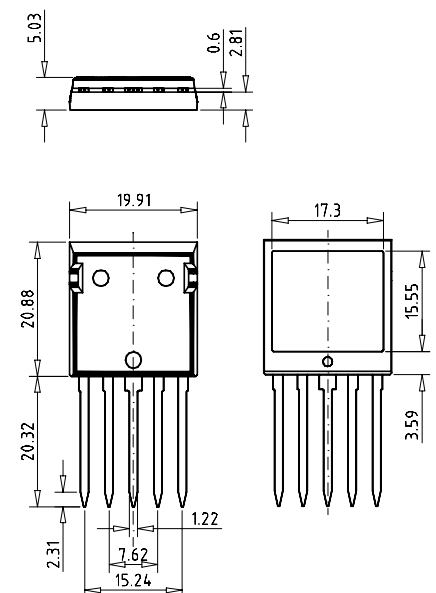
## Features

- Schottky diodes
  - very low forward voltage
  - extremely fast switching
- ISOPLUS i4-PAC™ package
  - isolated back surface
  - low coupling capacity between pins and heatsink
  - enlarged creepage towards heatsink
  - application friendly pinout
  - high reliability
  - industry standard outline
  - UL registered E 72873

## Applications

- high frequency rectifiers in
  - automotive drives and converters
  - hand held tools
  - low voltage power supplies
  - battery chargers
  - solar converters

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



315

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