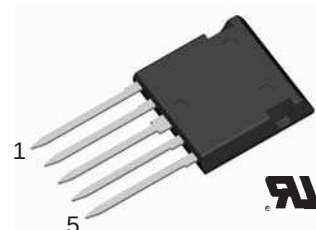
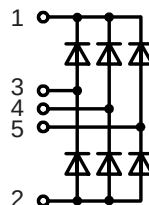


Schottky Three Phase Rectifier Bridge

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° (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 ($T_{VJ} = 25^\circ\text{C}$, unless otherwise specified)		
		min.	typ.	max.
V_F	$I_F = 15 \text{ A}$; $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 125^\circ\text{C}$	0.55	0.5	0.65 V V
I_R	$V_R = V_{RRM}$; $T_{VJ} = 25^\circ\text{C}$ $T_{VJ} = 125^\circ\text{C}$	100		5 mA mA
C_J	$V_R = 20 \text{ V}$	200		pF
R_{thJC}	(per diode)			3.1 K/W

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	K/W
d_S, d_A	pin - pin	1.7		mm
d_S, d_A	pin - backside metal	5.5		mm
Weight		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")

