

HTZ120A Series

$$I_{F(AV)} = 2.0 \text{ A}$$

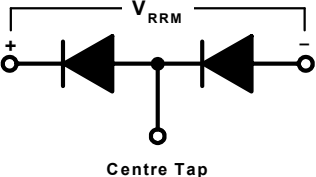
$$V_{RRM} = 51000 \text{ V}$$

High Voltage Diode Rectifier Module

LARONTROL
Electronic Devices

Type Number	Repetitive Peak	Minimum Avalanche Voltage $V_{(BR)R}$
HTZ120A51K	51000	54400
HTZ120A44K	44000	48000
HTZ120A38K	38000	41600
HTZ120A32K	32000	35200

CIRCUIT DIAGRAM



The circuit diagram shows a full-bridge rectifier with a center tap. The input is labeled V_{RRM} and the output is labeled Centre Tap. The bridge consists of four diodes connected in a square configuration. The center tap is connected to the midpoint of the bridge.



The photograph shows the physical component, a black rectangular module with mounting holes and a label. The label includes the part number HTZ120A51K and other specifications.

CURRENT RATINGS - AIR COOLED

$I_{F(AV)}$ Mean forward current

I_F Continuous (direct) forward current

$R_{th(j-a)}$ Thermal resistance junction to ambient

Half wave resistive load $T_{amb} = 35^\circ\text{C}$

$T_{amb} = 35^\circ\text{C}$

2.0 A

2.4 A

2.3 $^\circ\text{C/W}$

CURRENT RATINGS - OIL COOLED

$I_{F(AV)}$ Mean forward current

I_T Continuous (direct) forward current

$R_{th(j-o)}$ Thermal resistance junction to oil

Half wave resistive load $T_{oil} = 60^\circ\text{C}$

$T_{oil} = 60^\circ\text{C}$

3.3 A

4.1 A

0.93 $^\circ\text{C/W}$

SURGE RATINGS

I^2t I^2t for fusing

I_{FSM} Surge (non-repetitive) forward current

10 ms half sine $T_{vj} = 150^\circ\text{C}$

$T_{vj} = 150^\circ\text{C}$

200 A^2sec

200 A

TEMPERATURE AND FREQUENCY RATINGS

T_{vj} Virtual junction temperature

Forward (conducting)

180 $^\circ\text{C}$

Reverse (blocking)

180 $^\circ\text{C}$

T_{stg} Storage temperature range

-40 to 100 $^\circ\text{C}$

f Frequency range

20 to 400 Hz

CHARACTERISTICS $T_{case} = 25^\circ\text{C}$ unless otherwise stated

V_{FM} Forward voltage

At 12 Amps peak

max 36.8 V

I_{RM} Peak reverse current

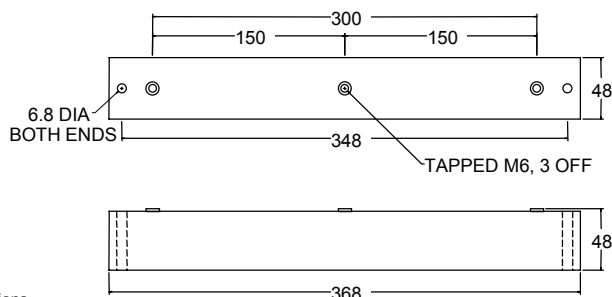
At V_{RRM} ; $T_{case} = 150^\circ\text{C}$

max 0.5 mA

Dimensioned Outlines

Dimensions shown are maximum in mm

Weight typ.: 1,66 Kg



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

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