

HTZ120A Series

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

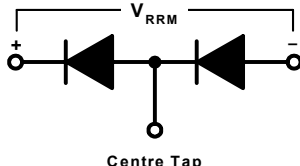
$$V_{RRM} = 51000 \text{ V}$$

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 consisting of four diodes connected in a bridge configuration. The input terminals are labeled with a positive (+) and negative (-) polarity. The output is taken from the center tap of the bridge, which is labeled "Centre Tap". The input voltage is denoted as V_{RRM} .



The photograph shows a black rectangular module, identified as the HTZ120A Series High Voltage Diode Rectifier Module. It features two mounting holes on the top surface and a label with technical specifications and a barcode.

CURRENT RATINGS - AIR COOLED

$I_{F(AV)}$	Mean forward current	Half wave resistive load $T_{amb} = 35^\circ\text{C}$	2.0	A
I_F	Continuous (direct) forward current	$T_{amb} = 35^\circ\text{C}$	2.4	A
$R_{th(j-a)}$	Thermal resistance junction to ambient		2.3	$^\circ\text{C/W}$

CURRENT RATINGS - OIL COOLED

$I_{F(AV)}$	Mean forward current	Half wave resistive load $T_{oil} = 60^\circ\text{C}$	3.3	A
I_T	Continuous (direct) forward current	$T_{oil} = 60^\circ\text{C}$	4.1	A
$R_{th(j-o)}$	Thermal resistance junction to oil		0.93	$^\circ\text{C/W}$

SURGE RATINGS

I^2t	I^2t for fusing	10 ms half sine $T_{vj} = 150^\circ\text{C}$	200	A^2sec
I_{FSM}	Surge (non-repetitive) forward current	$T_{vj} = 150^\circ\text{C}$	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

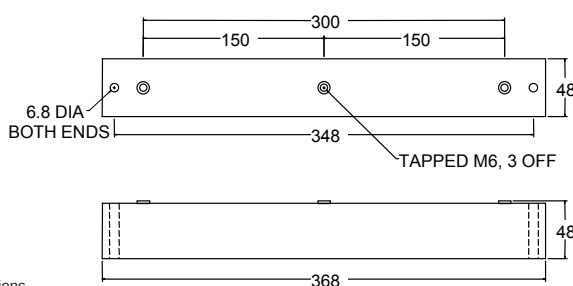
CHARACTERISTICS $T_{case} = 25^\circ\text{C}$ unless otherwise stated

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.

ZA

Issue 1 June 1998

Distributed by

USA
3540 Bassett Street
Santa Clara, CA 95054
Phone: (408) 982-0700
FAX: (408) 496-0670

EUROPE
IXYS Semiconductor GmbH
Lampertheim Germany
Phone: +49.6206.503.0
Fax: +49.6206.503.627

IXYS
www.IXYS.net

HTZ120A Series

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

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

High Voltage Diode Rectifier Module

LARONTROL
Electronic Devices

