

HTZ240F Series

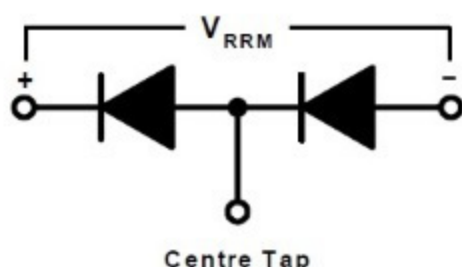
$$I_{F(AV)} = 1.7 \text{ A}$$

$$V_{RRM} = 16000 \text{ V}$$

High Voltage Diode Rectifier Module



CIRCUIT DIAGRAM



CURRENT RATINGS - AIR COOLED

$I_{F(AV)}$	Mean forward current	Half wave resistive load $T_{amb} = 35^{\circ}\text{C}$	1.7	A
I_F	Continuous (direct) forward current	$T_{amb} = 35^{\circ}\text{C}$	1.9	A
$R_{th(j-a)}$	Thermal resistance junction to ambient		7.9	$^{\circ}\text{C/W}$

CURRENT RATINGS - OIL COOLED

$I_{F(AV)}$	Mean forward current	Half wave resistive load $T_{oil} = 60^{\circ}\text{C}$	4.0	A
I_T	Continuous (direct) forward current	$T_{oil} = 60^{\circ}\text{C}$	4.9	A
$R_{th(j-o)}$	Thermal resistance junction to oil		2.14	$^{\circ}\text{C/W}$

SURGE RATINGS

I^2t	I^2t for fusing	10 ms half sine $T_{vj} = 150^{\circ}\text{C}$	50	A^2sec
I_{FSM}	Surge (non-repetitive) forward current	$T_{vj} = 150^{\circ}\text{C}$	100	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

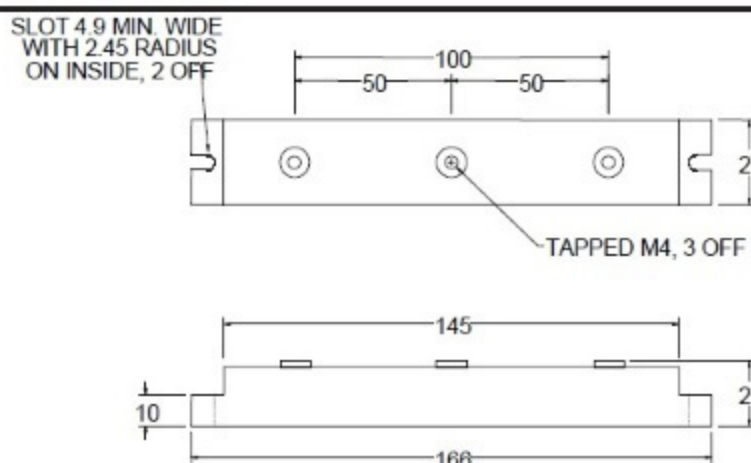
CHARACTERISTICS $T_{case} = 25^{\circ}\text{C}$ unless otherwise stated

V_{FM}	Forward voltage	At 2 Amps peak	max 10.0	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.: 0,20 Kg



ZF

Issue 1 June 1998

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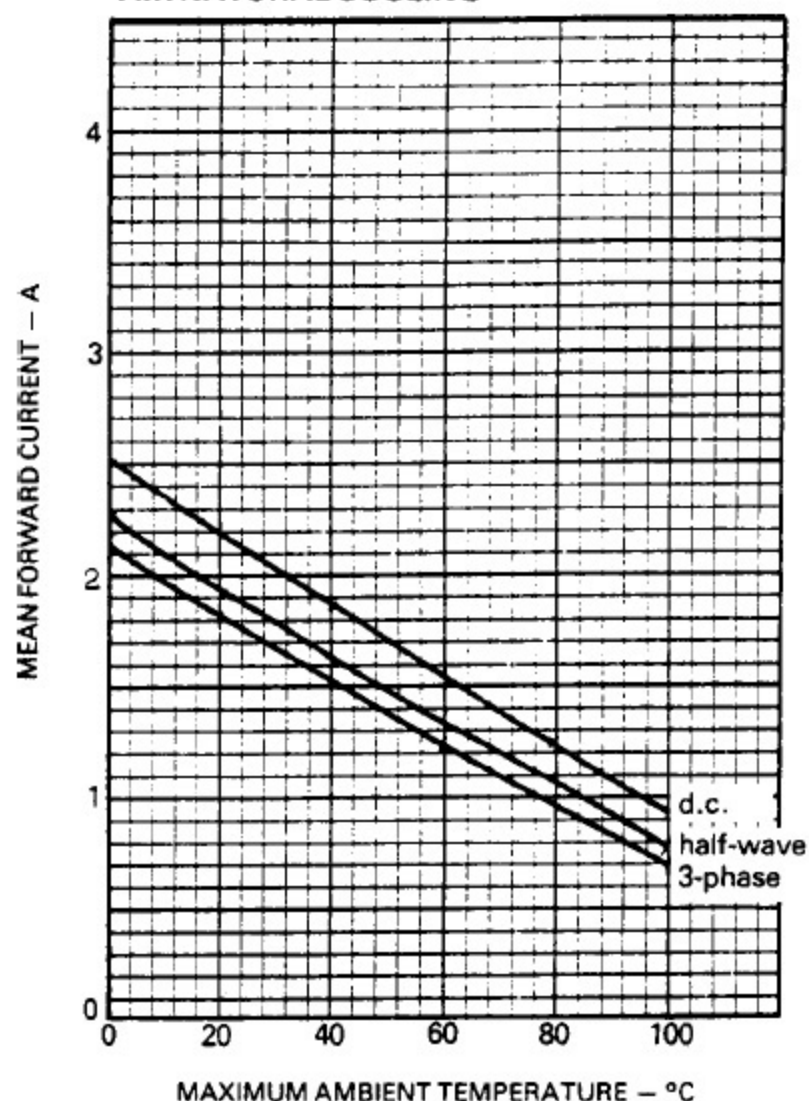
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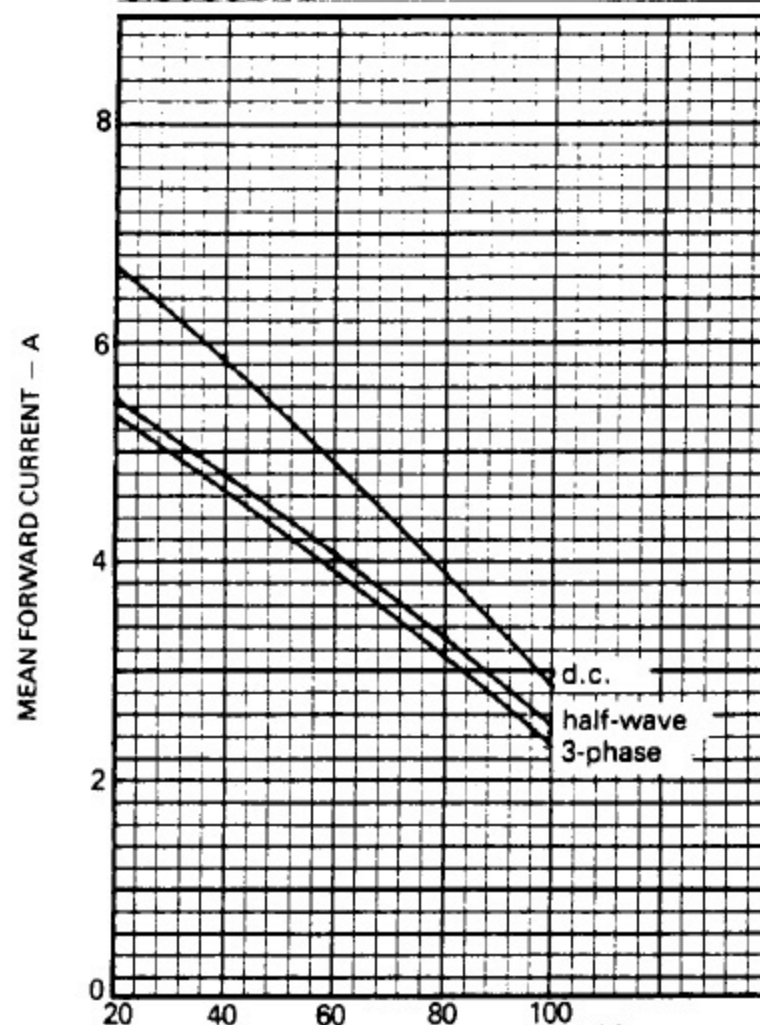
AIR NATURAL COOLING



MAXIMUM AMBIENT TEMPERATURE — °C

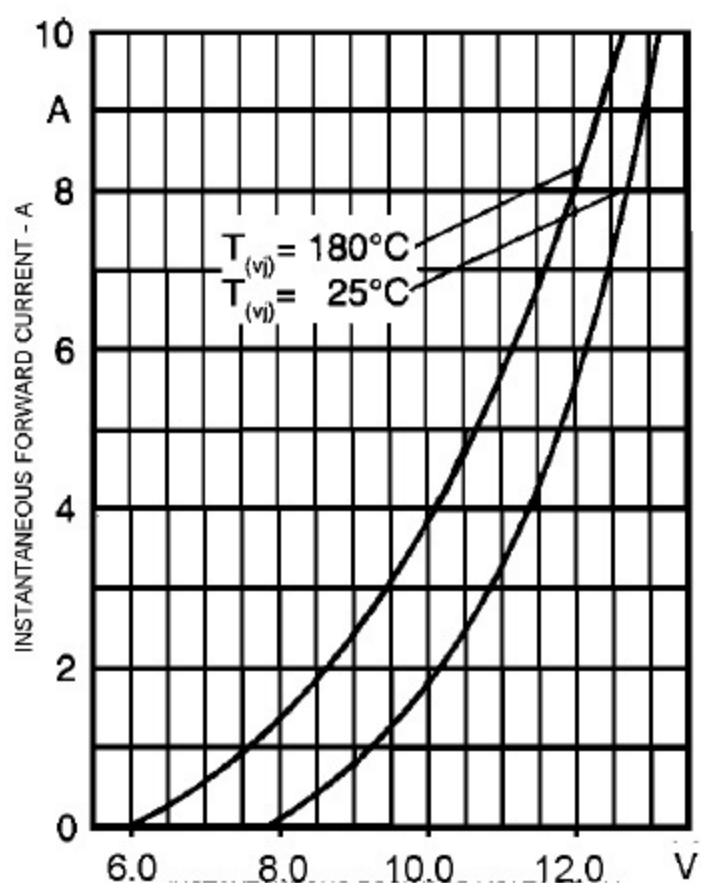
DERATING CURVES

OIL COOLING



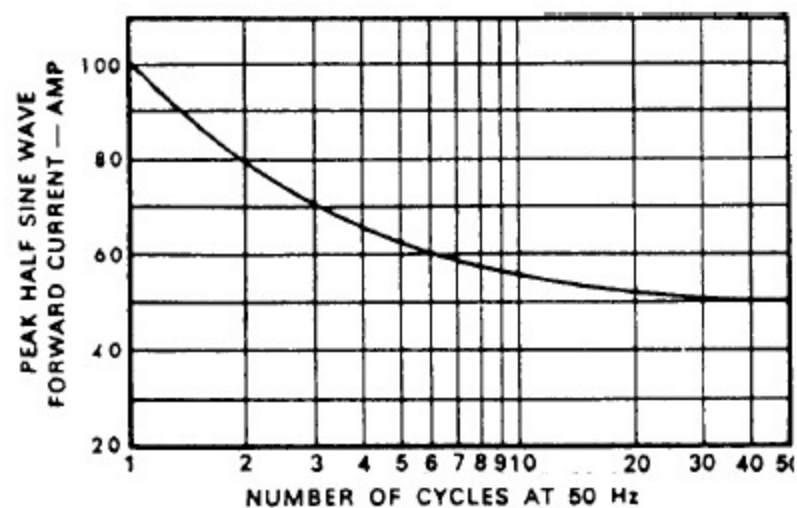
MAXIMUM OIL TEMPERATURE — °C

DERATING CURVES



INSTANTANEOUS FORWARD VOLTAGE — V

MAXIMUM (LIMIT) FORWARD
CHARACTERISTICS



SURGE (NON-REPETITIVE) FORWARD CURRENT
VERSUS TIME with reverse voltage. $T_j = 150^\circ\text{C}$