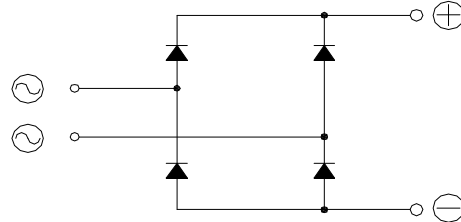


MMS90

POWER RECTIFIER BRIDGE

Output Current **90 A**



V_{RRM}	V_{RSM}	P/N
400	500	MMS90.04
600	700	MMS90.06
800	900	MMS90.08
1200	1300	MMS90.12
1600	1700	MMS90.16

Features

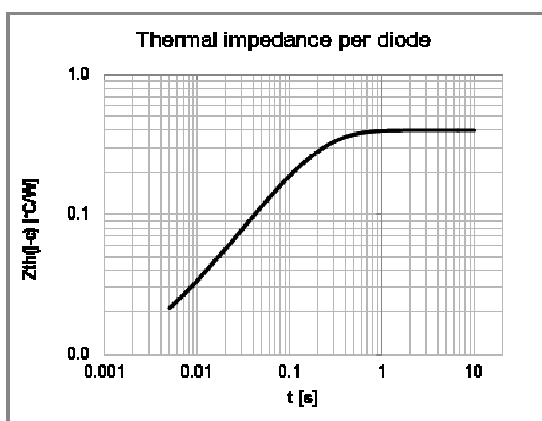
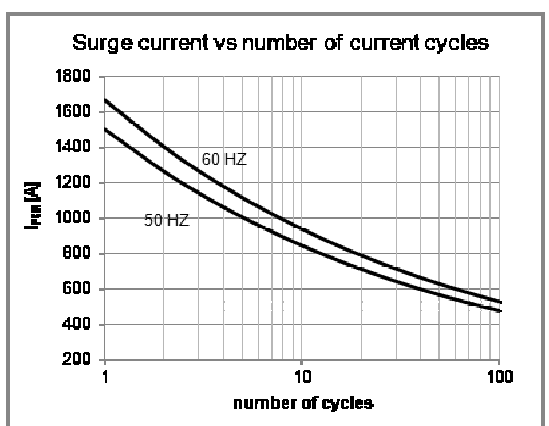
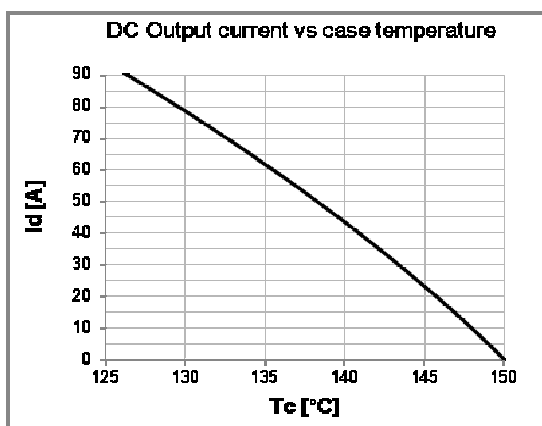
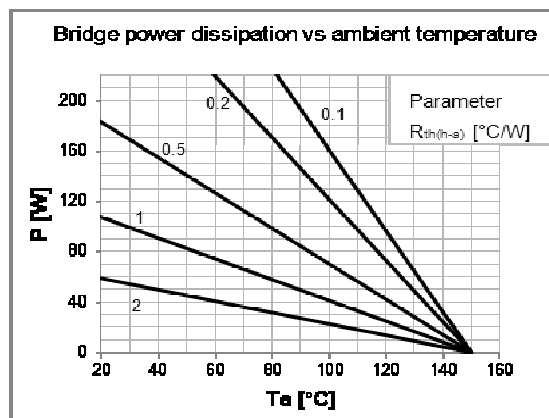
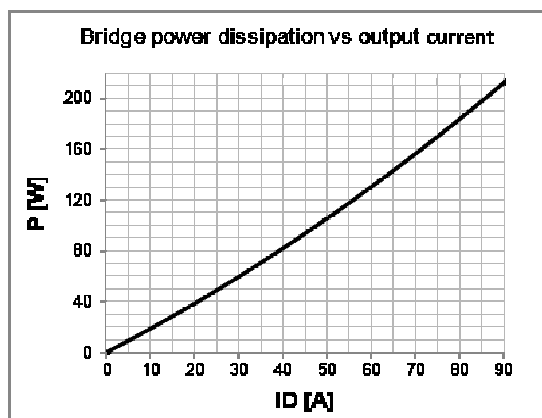
Low forward voltage diodes for high surge capability
Low thermal impedance packaging
Electrically insulated case

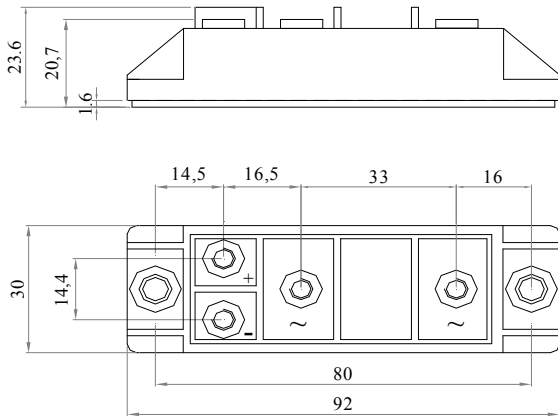
Applications

Input rectifier for variable frequency drives
Battery charger rectifiers
Single phase rectifier for power supplies
Rectifiers for DC motor fields supplies

Diodes characteristics		Conditions	T_j [°C]	Value
I_{RRM}	Max repetitive peak reverse current	$V = V_{RRM}$	150	4 mA
$V_F(T_O)$	Threshold voltage		150	0,9 V
r_F	Forward slope resistance		150	2,5 mΩ
V_{FM}	Peak forward voltage, max	$I_F = 100A$	25	1,1 V
I_{FSM}	Surge forward current	Half sine wave, 10 ms	150	1500 A
I^2t	Max I^2t for fusing		150	11250 A ² s
T_{jmax}	Operating junction temperature			-40 / 150 °C
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation		0,40 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rectangular wave 180° conduction		0,44 °C/W

Module characteristics		Conditions	Value
I_D	DC output current	$T_c = 126$ °C	90 A
I_D	DC output current	$T_a = 40$ °C ; freely suspended	10 A
V_{INS}	RMS Insulating voltage	50 / 60 Hz $t = 1$ s ($i < 1$ mA)	3600 V
V_{INS}	RMS Insulating voltage	50 / 60 Hz $t = 60$ s ($i < 1$ mA)	3000 V
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation	0,100 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rect. wave 180° conduction	0,111 °C/W
$R_{th(c-h)}$	Thermal resistance (case to heatsink)	Mounting surface flat, smooth and greased	0,100 °C/W
$R_{th(j-a)}$	Thermal resistance (junction to ambient)	Freely suspended or mounted on an insulator	9,0 °C/W
$R_{th(j-a)}$	Thermal resistance (junction to ambient)	Mounted on a painted metal sheet 250x250x1 mm	3,8 °C/W
T_{stg}	Max storage temperature		150 °C
W	Weight		85 g
M_1	Mounting torque, ± 15 %		4,5 N·m 40 lb·inch
M_2	Terminal connection torque, ± 15 %		3,0 N·m 26 lb·inch




Fig.1

MMS90.04-SS5-FIX5-HP-P80-TA

Code:960000900003

MMS90.06-SS5-FIX5-HP-P80-TA

Code:960000900011

MMS90.08-SS5-FIX5-HP-P80-TA

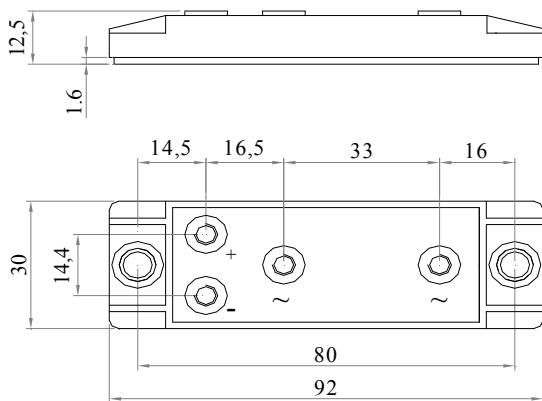
Code:960000900019

MMS90.12-SS5-FIX5-HP-P80-TA

Code:960000900027

MMS90.16-SS5-FIX5-HP-P80-TA

Code:960000900035


Fig.2

MMS90.04-SS5-FIX5-LP-P80-TA

Code:960000900002

MMS90.06-SS5-FIX5-LP-P80-TA

Code:960000900010

MMS90.08-SS5-FIX5-LP-P80-TA

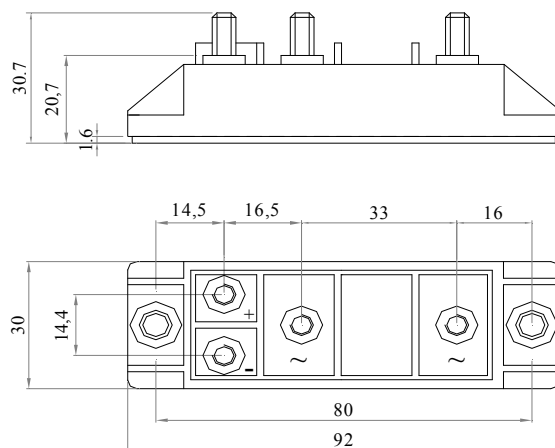
Code:960000900018

MMS90.12-SS5-FIX5-LP-P80-TA

Code:960000900026

MMS90.16-SS5-FIX5-LP-P80-TA

Code:960000900034


Fig.3

MMS90.04-MM5x10-FIX5-HP-P80-TA

Code:960000900001

MMS90.06-MM5x10-FIX5-HP-P80-TA

Code:960000900009

MMS90.08-MM5x10-FIX5-HP-P80-TA

Code:960000900017

MMS90.12-MM5x10-FIX5-HP-P80-TA

Code:960000900025

MMS90.16-MM5x10-FIX5-HP-P80-TA

Code:960000900033

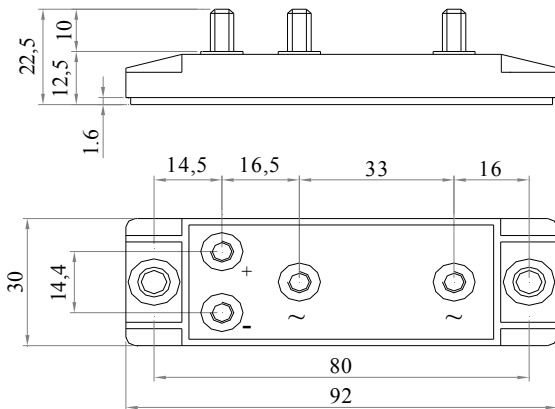
Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V
Power fix:

SS=Screw (M5)

MM=Bolt (M5)

Mounting fix:

FIX= Ø5,5


Fig.4

MMS90.04-MM5x10-FIX5-LP-P80-TA

Code:960000900000

MMS90.06-MM5x10-FIX5-LP-P80-TA

Code:960000900008

MMS90.08-MM5x10-FIX5-LP-P80-TA

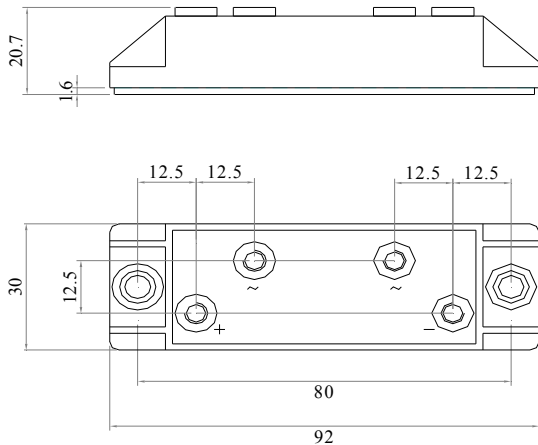
Code:960000900016

MMS90.12-MM5x10-FIX5-LP-P80-TA

Code:960000900024

MMS90.16-MM5x10-FIX5-LP-P80-TA

Code:960000900032


Fig.5

MMS90.04-SS5-FIX5-HP-P80-TB

Code:960000900007

MMS90.06-SS5-FIX5-HP-P80-TB

Code:960000900015

MMS90.08-SS5-FIX5-HP-P80-TB

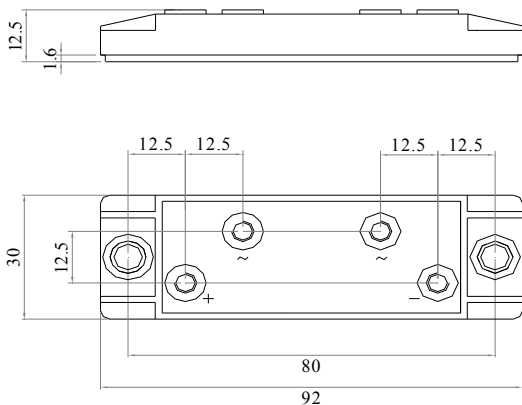
Code:960000900023

MMS90.12-SS5-FIX5-HP-P80-TB

Code:960000900031

MMS90.16-SS5-FIX5-HP-P80-TB

Code:960000900039


Fig.6

MMS90.04-SS5-FIX5-LP-P80-TB

Code:960000900006

MMS90.06-SS5-FIX5-LP-P80-TB

Code:960000900014

MMS90.08-SS5-FIX5-LP-P80-TB

Code:960000900022

MMS90.12-SS5-FIX5-LP-P80-TB

Code:960000900030

MMS90.16-SS5-FIX5-LP-P80-TB

Code:960000900038

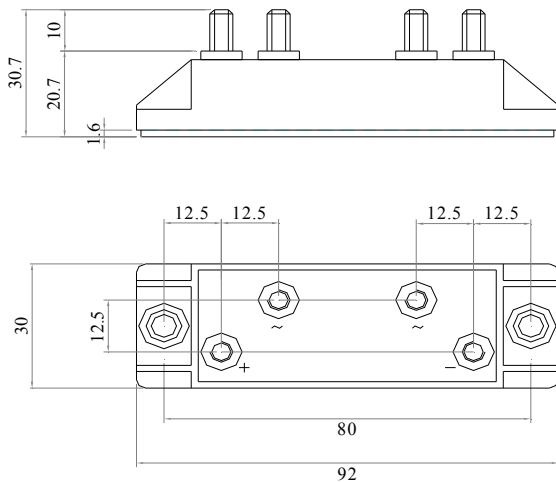
Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V
Power fix:

SS=Screw (M5)

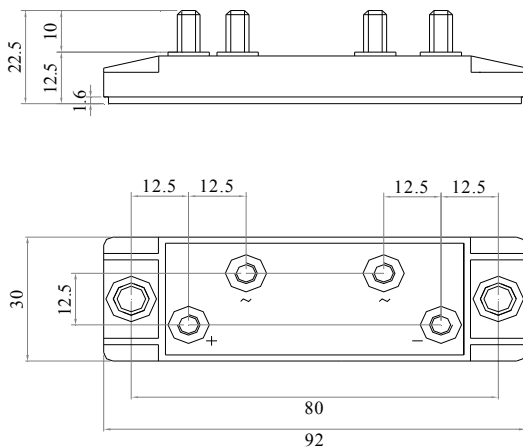
MM=Bolt (M5)

Mounting fix:

FIX= Ø5,5


Fig.7

MMS90.04-MM5x10-FIX5-HP-P80-TB
Code:960000900005
MMS90.06-MM5x10-FIX5-HP-P80-TB
Code:960000900013
MMS90.08-MM5x10-FIX5-HP-P80-TB
Code:960000900021
MMS90.12-MM5x10-FIX5-HP-P80-TB
Code:960000900029
MMS90.16-MM5x10-FIX5-HP-P80-TB
Code:960000900037


Fig.8

MMS90.04-MM5x10-FIX5-LP-P80-TB
Code:960000900004
MMS90.06-MM5x10-FIX5-LP-P80-TB
Code:960000900012
MMS90.08-MM5x10-FIX5-LP-P80-TB
Code:960000900020
MMS90.12-MM5x10-FIX5-LP-P80-TB
Code:960000900028
MMS90.16-MM5x10-FIX5-LP-P80-TB
Code:960000900036

Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V

Power fix:
MM=Bolt (M5)

Mounting fix:
FIX= Ø5,5