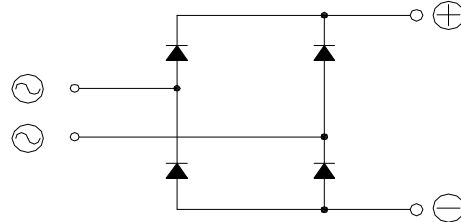


MMS90

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

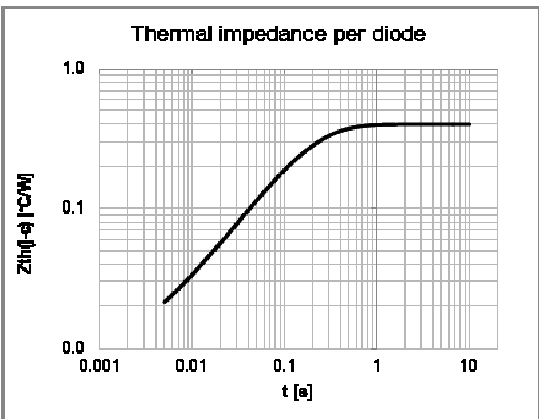
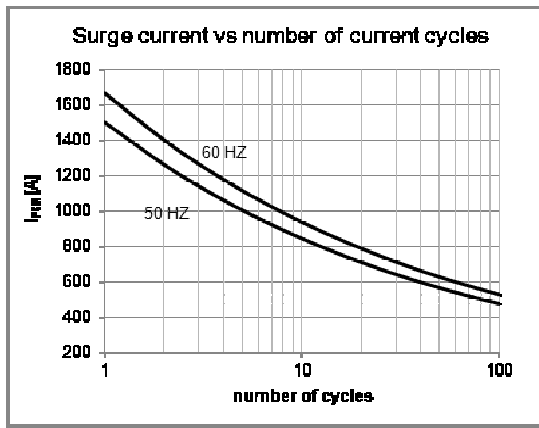
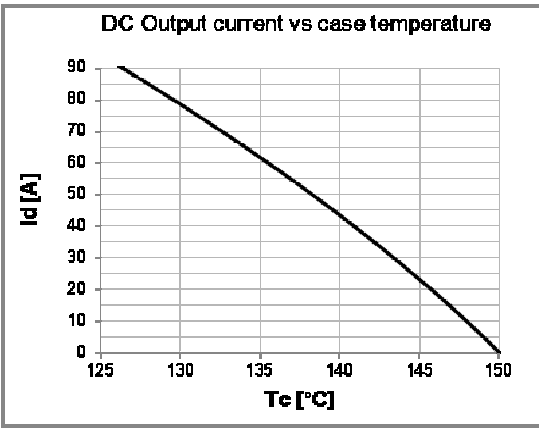
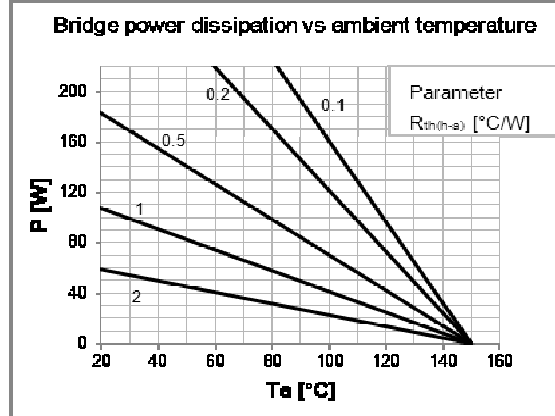
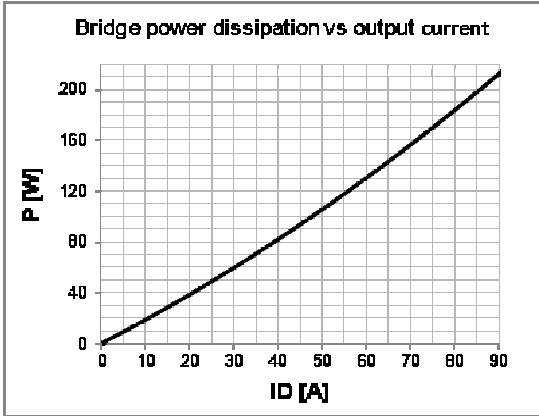
- Low forward voltage diodes for high surge capability
- Low thermal impedance packaging
- Electrically insulated case

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	Tj [°C]	Value
IRRM	Max repetitive peak reverse current	$V = V_{RRM}$	150	4 mA
$V_{F(TO)}$	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



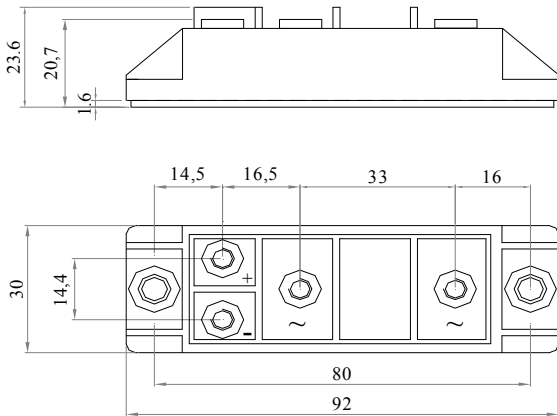


Fig.1

- 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

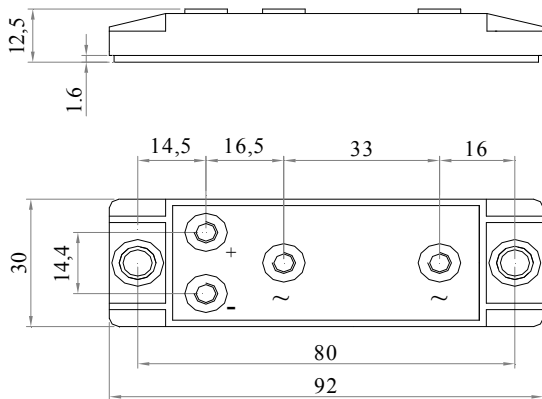


Fig.2

- 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

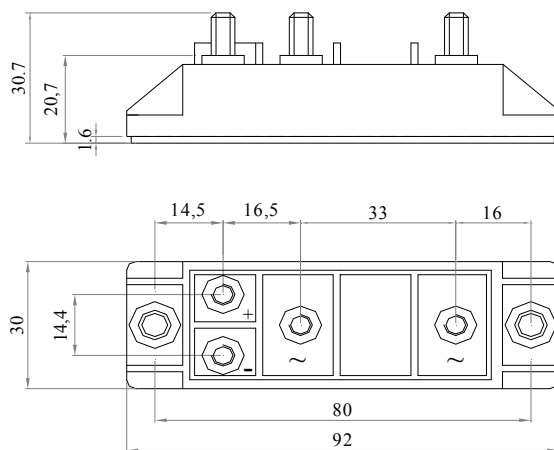


Fig.3

- 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

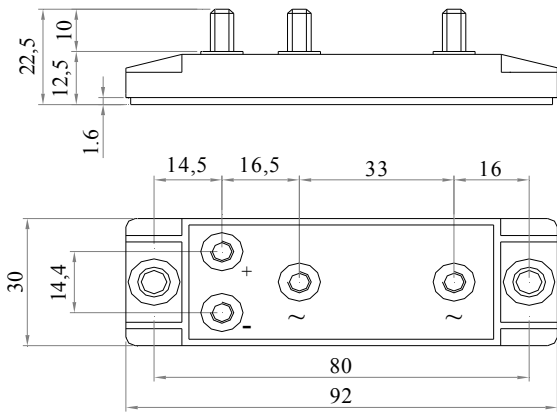


Fig.4

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

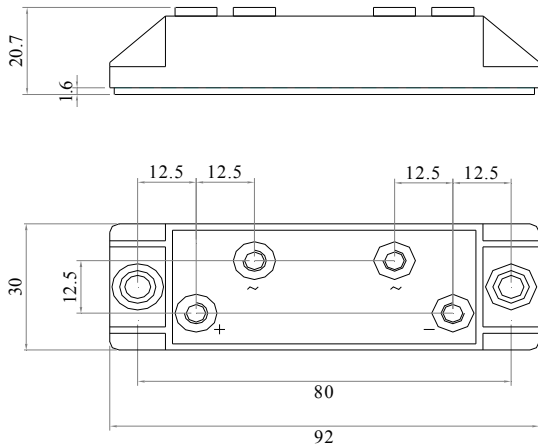


Fig.5

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

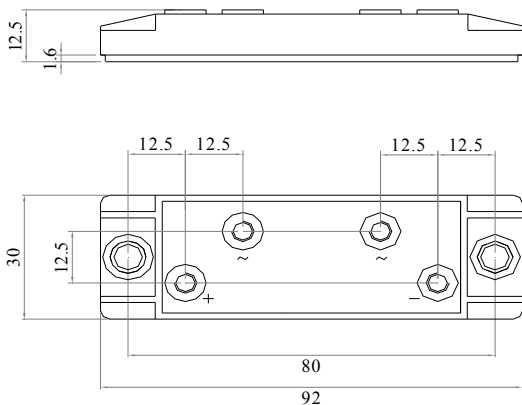


Fig.6

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= \varnothing 5,5

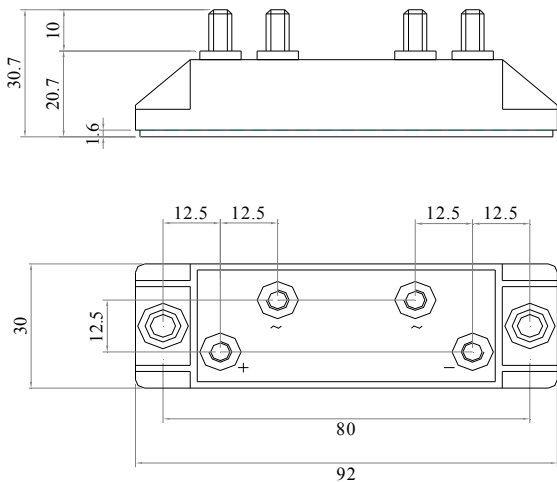


Fig.7

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

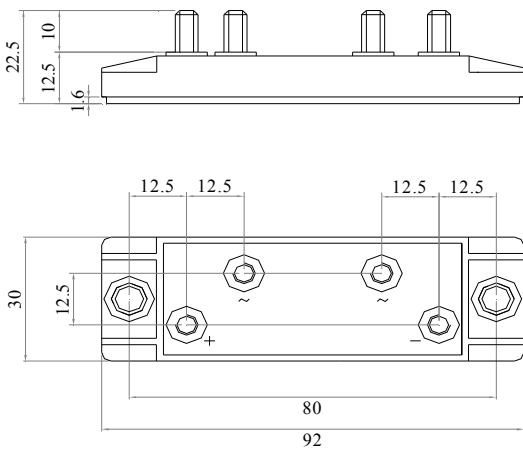


Fig.8

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