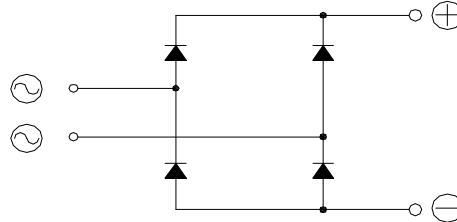


MMS50

POWER RECTIFIER BRIDGE

Output Current **50 A**



V_{RRM}	V_{RSM}	P/N
400	500	MMS50.04
600	700	MMS50.06
800	900	MMS50.08
1200	1300	MMS50.12
1600	1700	MMS50.16

Features

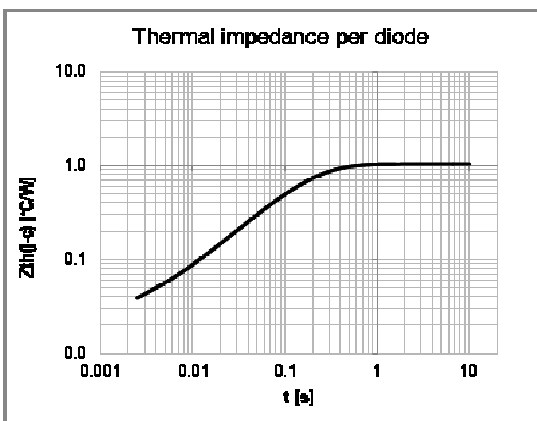
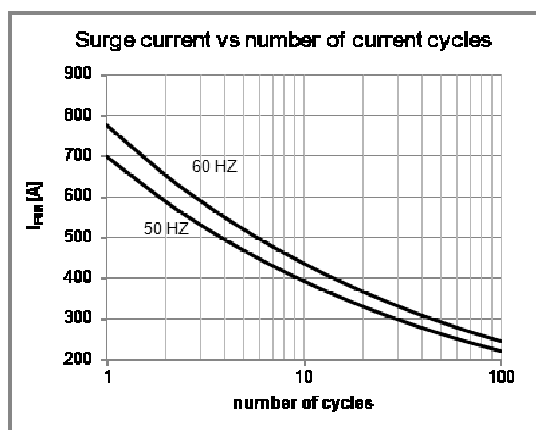
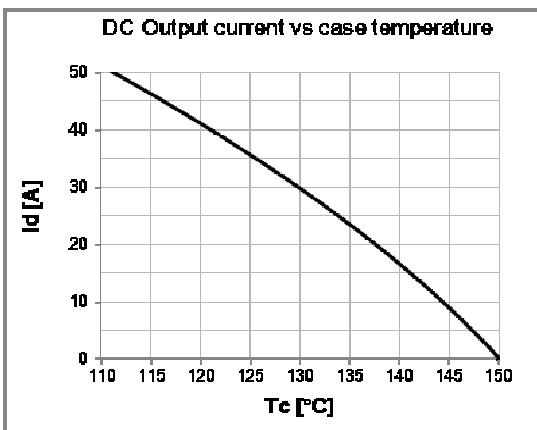
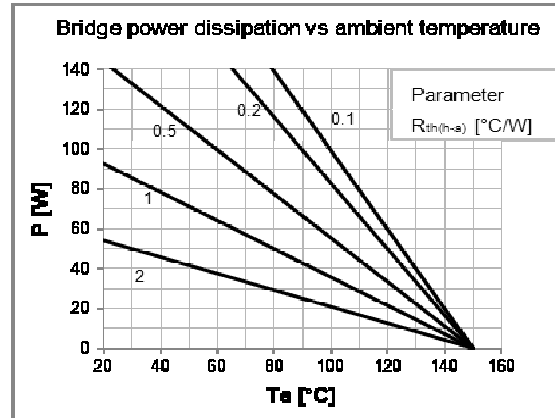
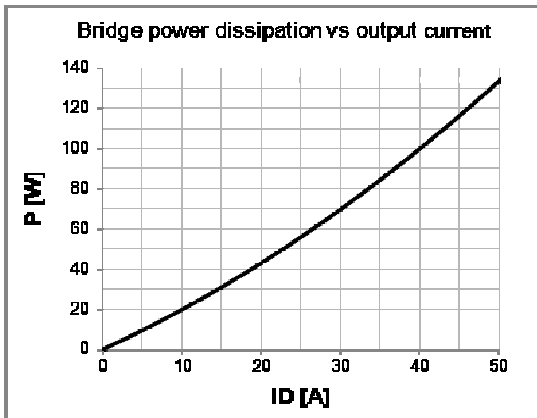
Low forward voltage diodes for high surge capability
 Low thermal impedance packaging
 Electrically insulated case

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
I_{RRM}	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	7,0 mΩ
V_{FM}	Peak forward voltage, max	$I_F = 100A$	25	1,5 V
I_{FSM}	Surge forward current	Half sine wave, 10 ms	150	700 A
I^2t	Max I^2t for fusing		150	2450 A ² s
T_{jmax}	Operating junction temperature			-40 / 150 °C
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation		1,04 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rectangular wave 180° conduction		1,16 °C/W

Module characteristics		Conditions	Value
I_D	DC output current	$T_c = 111\text{ °C}$	50 A
I_D	DC output current	$T_a = 40\text{ °C}$; freely suspended	5 A
V_{INS}	RMS Insulating voltage	50 / 60 Hz $t = 1\text{ s}$ ($i < 1\text{ mA}$)	3600 V
V_{INS}	RMS Insulating voltage	50 / 60 Hz $t = 60\text{ s}$ ($i < 1\text{ mA}$)	3000 V
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation	0,261 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rect. wave 180° conduction	0,290 °C/W
$R_{th(c-h)}$	Thermal resistance (case to heatsink)	Mounting surface flat, smooth and greased	0,115 °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



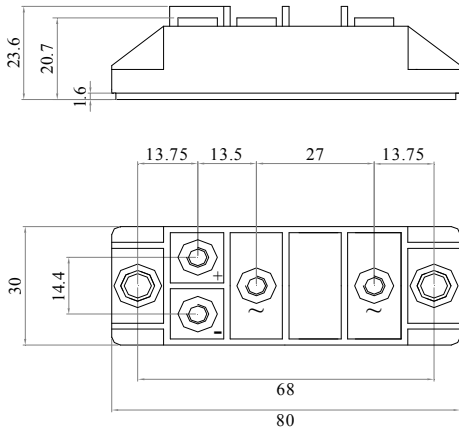


Fig.1

- MMS50.04-SS5-FIX5-HP-P68-TA
Code:960000500006
- MMS50.06-SS5-FIX5-HP-P68-TA
Code:960000500020
- MMS50.08-SS5-FIX5-HP-P68-TA
Code:960000500034
- MMS50.12-SS5-FIX5-HP-P68-TA
Code:960000500048
- MMS50.16-SS5-FIX5-HP-P68-TA
Code:960000500062

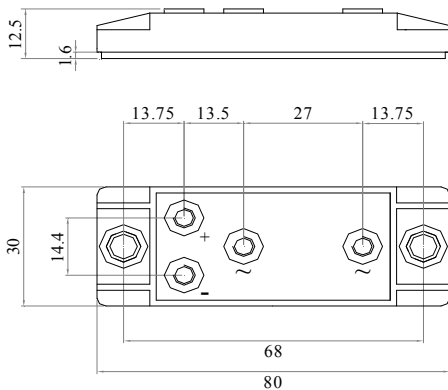


Fig.2

- MMS50.04-SS5-FIX5-LP-P68-TA
Code:960000500005
- MMS50.06-SS5-FIX5-LP-P68-TA
Code:960000500019
- MMS50.08-SS5-FIX5-LP-P68-TA
Code:960000500033
- MMS50.12-SS5-FIX5-LP-P68-TA
Code:960000500047
- MMS50.16-SS5-FIX5-LP-P68-TA
Code:960000500061

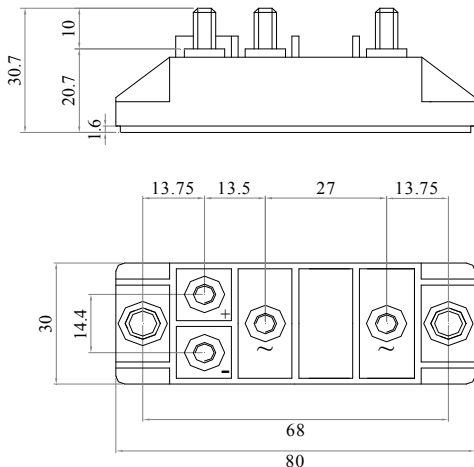


Fig.3

- MMS50.04-MM5x10-FIX5-HP-P68-TA
Code:960000500004
- MMS50.06-MM5x10-FIX5-HP-P68-TA
Code:960000500018
- MMS50.08-MM5x10-FIX5-HP-P68-TA
Code:960000500032
- MMS50.12-MM5x10-FIX5-HP-P68-TA
Code:960000500046
- MMS50.16-MM5x10-FIX5-HP-P68-TA
Code:960000500060

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

Power fix:

SS=Screw (M5)
MM=Bolt (M5)

Mounting fix:

FIX= Ø5,5

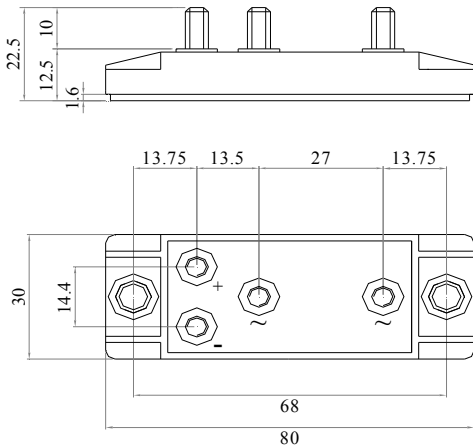


Fig.4

MMS50.04-MM5x10-FIX5-LP-P68-TA
Code:960000500003
MMS50.06-MM5x10-FIX5-LP-P68-TA
Code:960000500017
MMS50.08-MM5x10-FIX5-LP-P68-TA
Code:960000500031
MMS50.12-MM5x10-FIX5-LP-P68-TA
Code:960000500045
MMS50.16-MM5x10-FIX5-LP-P68-TA
Code:960000500059

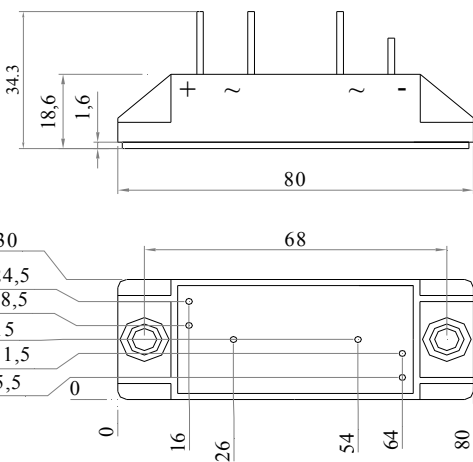


Fig.5

MMS50.04-LLØ1.2-FIX5-HP-P68-TA
Code:960000500002
MMS50.06-LLØ1.2-FIX5-HP-P68-TA
Code:960000500016
MMS50.08-LLØ1.2-FIX5-HP-P68-TA
Code:960000500030
MMS50.12-LLØ1.2-FIX5-HP-P68-TA
Code:960000500044
MMS50.16-LLØ1.2-FIX5-HP-P68-TA
Code:960000500058

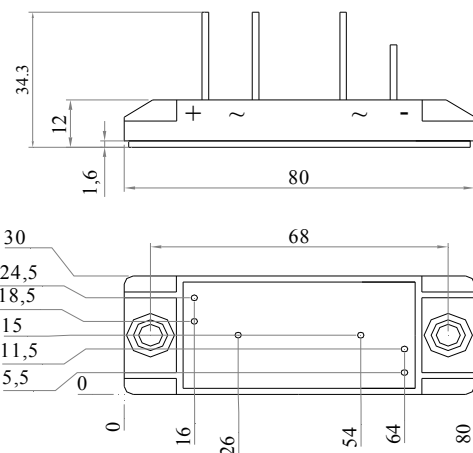


Fig.6

MMS50.04-LLØ1.2-FIX5-LP-P68-TA
Code:960000500001
MMS50.06-LLØ1.2-FIX5-LP-P68-TA
Code:960000500015
MMS50.08-LLØ1.2-FIX5-LP-P68-TA
Code:960000500029
MMS50.12-LLØ1.2-FIX5-LP-P68-TA
Code:960000500043
MMS50.16-LLØ1.2-FIX5-LP-P68-TA
Code:960000500057

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

Power fix:

MM=Bolt (M5)
LL=Legs (Ø1,2)

Mounting fix:

FIX= Ø5,5

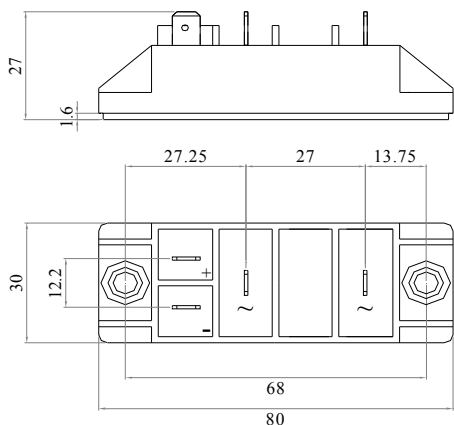


Fig.7

MMS50.04-FF-FIX5-HP-P68-TA
Code:960000500000
MMS50.06-FF-FIX5-HP-P68-TA
Code:960000500014
MMS50.08-FF-FIX5-HP-P68-TA
Code:960000500028
MMS50.12-FF-FIX5-HP-P68-TA
Code:960000500042
MMS50.16-FF-FIX5-HP-P68-TA
Code:960000500056

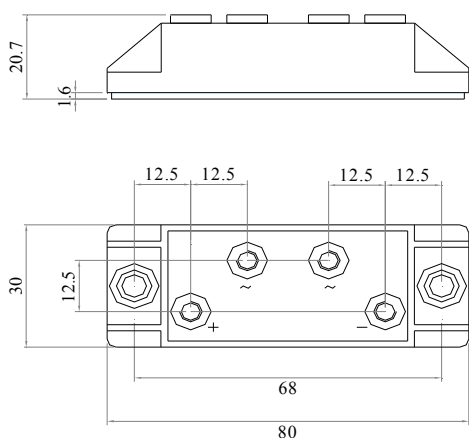


Fig.8

MMS50.04-SS5-FIX5-HP-P68-TB
Code:960000500013
MMS50.06-SS5-FIX5-HP-P68-TB
Code:960000500027
MMS50.08-SS5-FIX5-HP-P68-TB
Code:960000500041
MMS50.12-SS5-FIX5-HP-P68-TB
Code:960000500055
MMS50.16-SS5-FIX5-HP-P68-TB
Code:960000500069

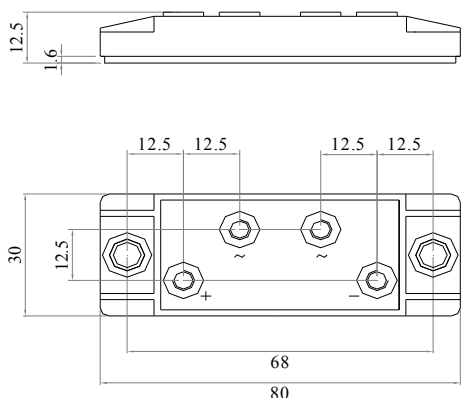


Fig.9

MMS50.04-SS5-FIX5-LP-P68-TB
Code:960000500012
MMS50.06-SS5-FIX5-LP-P68-TB
Code:960000500026
MMS50.08-SS5-FIX5-LP-P68-TB
Code:960000500040
MMS50.12-SS5-FIX5-LP-P68-TB
Code:960000500054
MMS50.16-SS5-FIX5-LP-P68-TB
Code:960000500068

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

Power fix:

FF=Faston(6,3x0,8)

SS=Screw (M5)

Mounting fix:

FIX= \varnothing 5,5

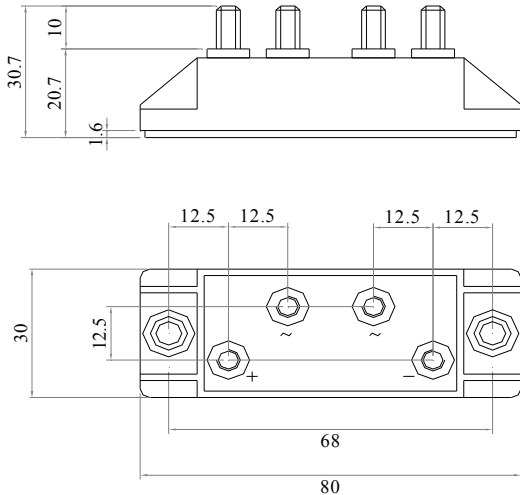


Fig.10 MMS50.04-MM5x10-FIX5-HP-P68-TB
Code:960000500011
MMS50.06-MM5x10-FIX5-HP-P68-TB
Code:960000500025
MMS50.08-MM5x10-FIX5-HP-P68-TB
Code:960000500039
MMS50.12-MM5x10-FIX5-HP-P68-TB
Code:960000500053
MMS50.16-MM5x10-FIX5-HP-P68-TB
Code:960000500067

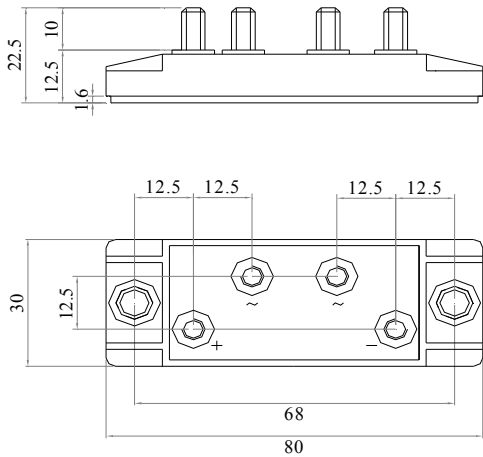


Fig.11 MMS50.04-MM5x10-FIX5-LP-P68-TB
Code:960000500010
MMS50.06-MM5x10-FIX5-LP-P68-TB
Code:960000500024
MMS50.08-MM5x10-FIX5-LP-P68-TB
Code:960000500038
MMS50.12-MM5x10-FIX5-LP-P68-TB
Code:960000500052
MMS50.16-MM5x10-FIX5-LP-P68-TB
Code:960000500066

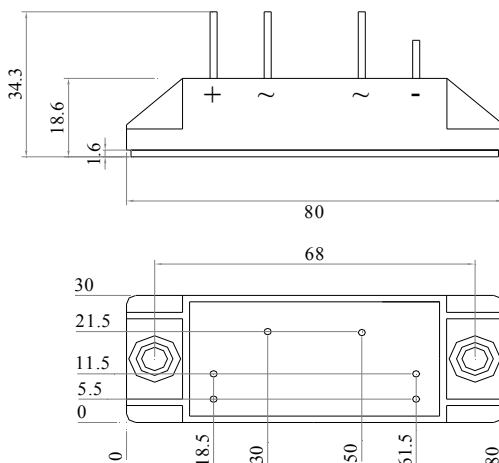


Fig.12 MMS50.04-LLØ1.2-FIX5-HP-P68-TB
Code:960000500009
MMS50.06-LLØ1.2-FIX5-HP-P68-TB
Code:960000500023
MMS50.08-LLØ1.2-FIX5-HP-P68-TB
Code:960000500037
MMS50.12-LLØ1.2-FIX5-HP-P68-TB
Code:960000500051
MMS50.16-LLØ1.2-FIX5-HP-P68-TB
Code:960000500065

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

Power fix:
MM=Bolt (M5)
LL=Legs (Ø1,2)

Mounting fix:
FIX= Ø5,5

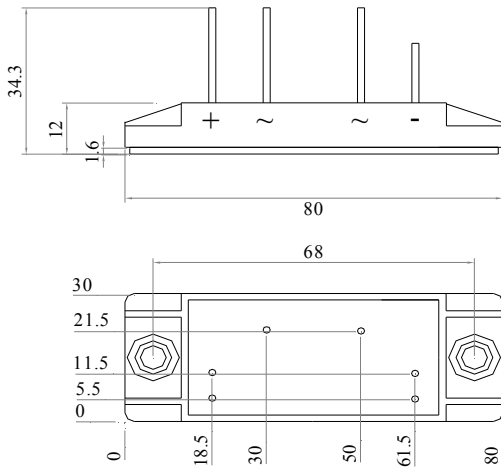


Fig.13 MMS50.04-LLØ1.2-FIX5-LP-P68-TB
Code:960000500008
MMS50.06-LLØ1.2-FIX5-LP-P68-TB
Code:960000500022
MMS50.08-LLØ1.2-FIX5-LP-P68-TB
Code:960000500036
MMS50.12-LLØ1.2-FIX5-LP-P68-TB
Code:960000500050
MMS50.16-LLØ1.2-FIX5-LP-P68-TB
Code:960000500064

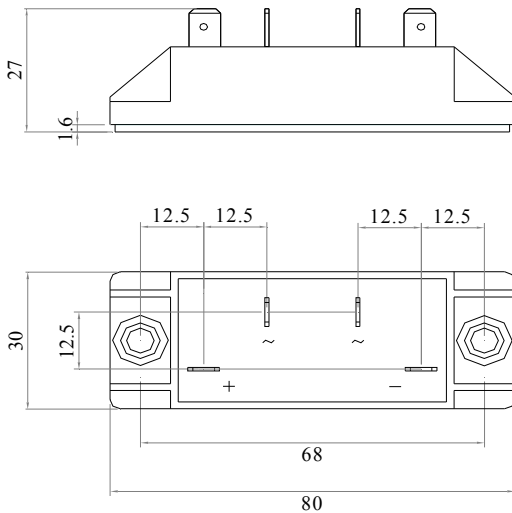


Fig.14 MMS50.04-FF-FIX5-HP-P68-TB
Code:960000500007
MMS50.06-FF-FIX5-HP-P68-TB
Code:960000500021
MMS50.08-FF-FIX5-HP-P68-TB
Code:960000500035
MMS50.12-FF-FIX5-HP-P68-TB
Code:960000500049
MMS50.16-FF-FIX5-HP-P68-TB
Code:960000500063

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

Power fix:
LL=Legs (Ø1,2)
FF=Faston(6,3x0,8)

Mounting fix:
FIX= Ø5,5