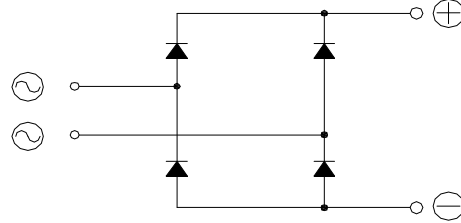


MMS70

POWER RECTIFIER BRIDGE

Output Current **70 A**



V_{RRM}	V_{RSM}	P/N
400	500	MMS70.04
600	700	MMS70.06
800	900	MMS70.08
1200	1300	MMS70.12
1600	1700	MMS70.16

Features

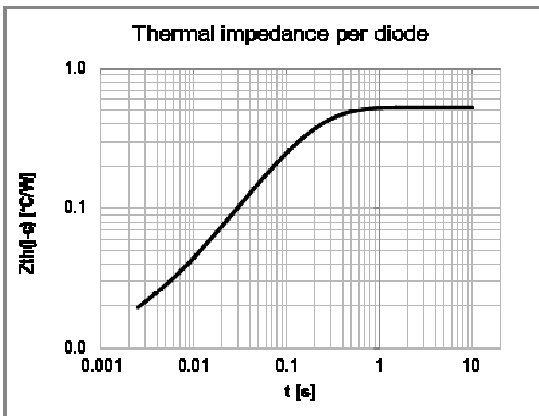
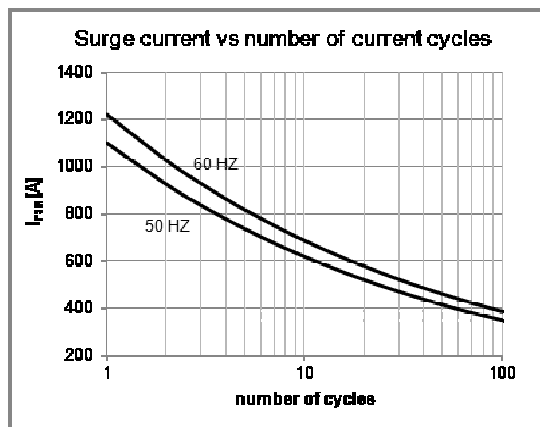
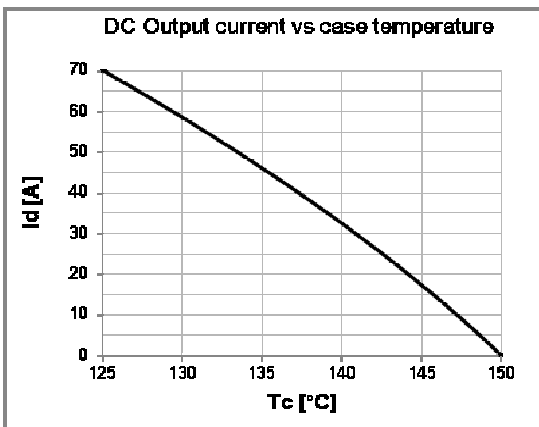
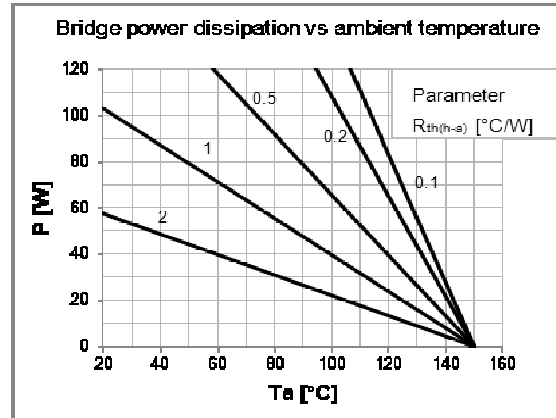
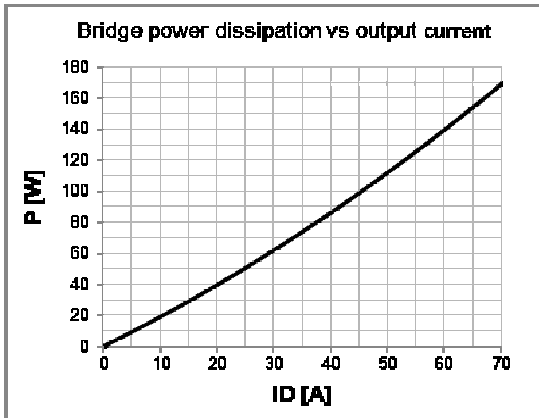
- Low forward voltage diodes for high surge capability
- Low thermal impedance packaging
- Electrically insulated case

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
$V_{F(TO)}$	Threshold voltage		150	0,9 V
r_F	Forward slope resistance		150	3,5 mΩ
V_{FM}	Peak forward voltage, max	$I_F = 100A$	25	1,2 V
I_{FSM}	Surge forward current	Half sine wave, 10 ms	150	1100 A
I^2t	Max I^2t for fusing		150	6050 A ² s
T_{jmax}	Operating junction temperature			-40 / 150 °C
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation		0,53 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rectangular wave 180° conduction		0,59 °C/W

Module characteristics		Conditions	Value
I_D	DC output current	$T_c = 125$ °C	70 A
I_D	DC output current	$T_a = 40$ °C ; freely suspended	8 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	0,133 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rect. wave 180° conduction	0,148 °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



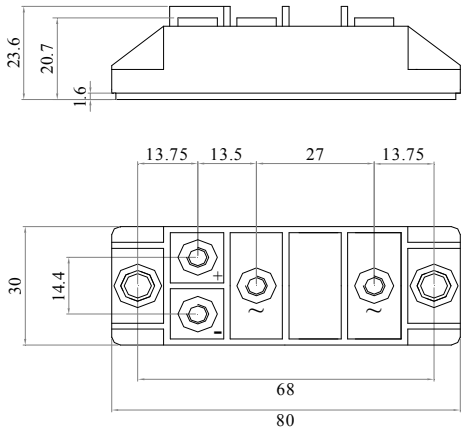


Fig.1

- MMS70.04-SS5-FIX5-HP-P68-TA
Code:960000700003
- MMS70.06-SS5-FIX5-HP-P68-TA
Code:960000700011
- MMS70.08-SS5-FIX5-HP-P68-TA
Code:960000700019
- MMS70.12-SS5-FIX5-HP-P68-TA
Code:960000700027
- MMS70.16-SS5-FIX5-HP-P68-TA
Code:960000700035

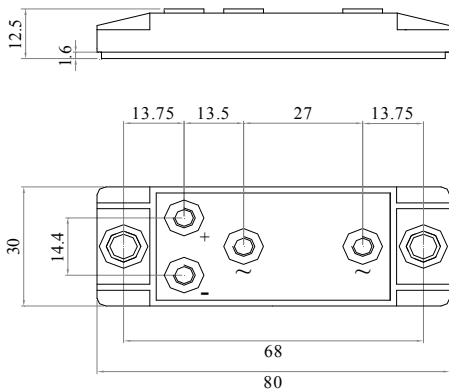


Fig.2

- MMS70.04-SS5-FIX5-LP-P68-TA
Code:960000700002
- MMS70.06-SS5-FIX5-LP-P68-TA
Code:960000700010
- MMS70.08-SS5-FIX5-LP-P68-TA
Code:960000700018
- MMS70.12-SS5-FIX5-LP-P68-TA
Code:960000700026
- MMS70.16-SS5-FIX5-LP-P68-TA
Code:960000700034

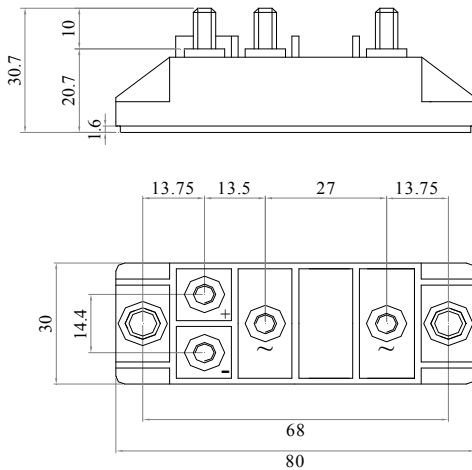


Fig.3

- MMS70.04-MM5x10-FIX5-HP-P68-TA
Code:960000700001
- MMS70.06-MM5x10-FIX5-HP-P68-TA
Code:960000700009
- MMS70.08-MM5x10-FIX5-HP-P68-TA
Code:960000700017
- MMS70.12-MM5x10-FIX5-HP-P68-TA
Code:960000700025
- MMS70.16-MM5x10-FIX5-HP-P68-TA
Code:960000700033

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

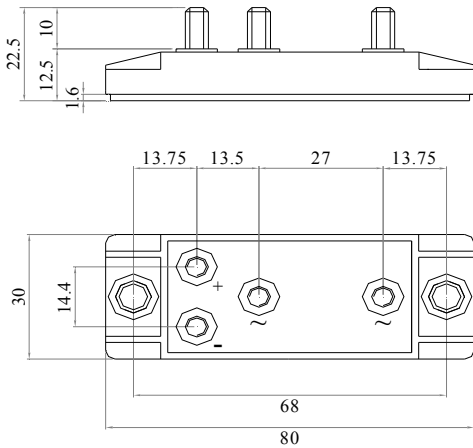


Fig.4

- MMS70.04-MM5x10-FIX5-LP-P68-TA
Code:960000700000
- MMS70.06-MM5x10-FIX5-LP-P68-TA
Code:960000700008
- MMS70.08-MM5x10-FIX5-LP-P68-TA
Code:960000700016
- MMS70.12-MM5x10-FIX5-LP-P68-TA
Code:960000700024
- MMS70.16-MM5x10-FIX5-LP-P68-TA
Code:960000700032

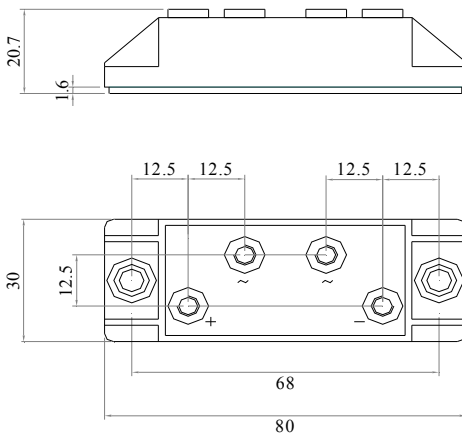


Fig.5

- MMS70.04-SS5-FIX5-HP-P68-TB
Code:960000700007
- MMS70.06-SS5-FIX5-HP-P68-TB
Code:960000700015
- MMS70.08-SS5-FIX5-HP-P68-TB
Code:960000700023
- MMS70.12-SS5-FIX5-HP-P68-TB
Code:960000700031
- MMS70.16-SS5-FIX5-HP-P68-TB
Code:960000700039

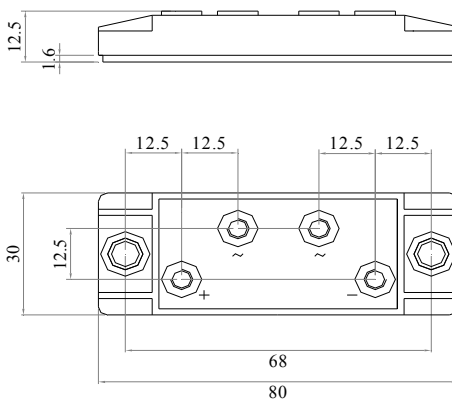


Fig.6

- MMS70.04-SS5-FIX5-LP-P68-TB
Code:960000700006
- MMS70.06-SS5-FIX5-LP-P68-TB
Code:960000700014
- MMS70.08-SS5-FIX5-LP-P68-TB
Code:960000700022
- MMS70.12-SS5-FIX5-LP-P68-TB
Code:960000700030
- MMS70.16-SS5-FIX5-LP-P68-TB
Code:960000700038

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

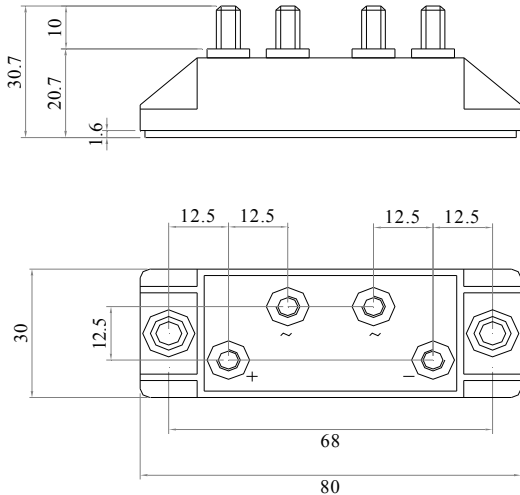


Fig.7

- MMS70.04-MM5x10-FIX5-HP-P68-TB
Code:960000700005
- MMS70.06-MM5x10-FIX5-HP-P68-TB
Code:960000700013
- MMS70.08-MM5x10-FIX5-HP-P68-TB
Code:960000700021
- MMS70.12-MM5x10-FIX5-HP-P68-TB
Code:960000700029
- MMS70.16-MM5x10-FIX5-HP-P68-TB
Code:960000700037

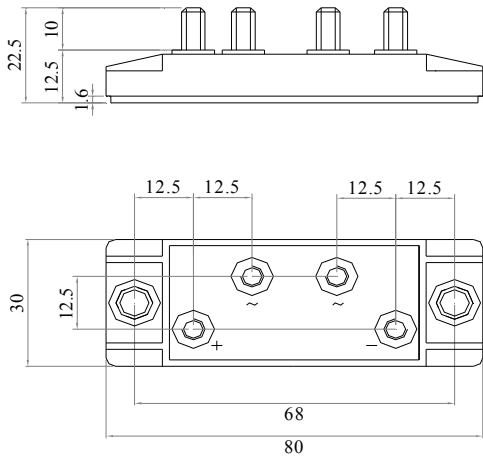


Fig.8

- MMS70.04-MM5x10-FIX5-LP-P68-TB
Code:960000700004
- MMS70.06-MM5x10-FIX5-LP-P68-TB
Code:960000700012
- MMS70.08-MM5x10-FIX5-LP-P68-TB
Code:960000700020
- MMS70.12-MM5x10-FIX5-LP-P68-TB
Code:960000700028
- MMS70.16-MM5x10-FIX5-LP-P68-TB
Code:960000700036

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

Power fix:
SS=Screw (M5)
MM=Bolt (M5)

Mounting fix:
FIX= Ø5,5