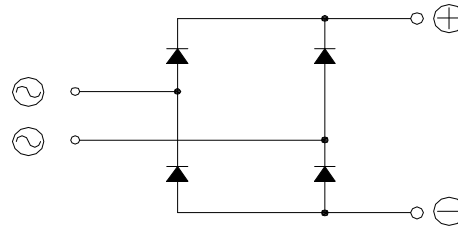




BM70

POWER RECTIFIER BRIDGE

Output Current **70 A**



V_{RRM}	V_{RSM}	P/N
400	500	BM70.04
600	700	BM70.06
800	900	BM70.08
1200	1300	BM70.12
1600	1700	BM70.16

Features

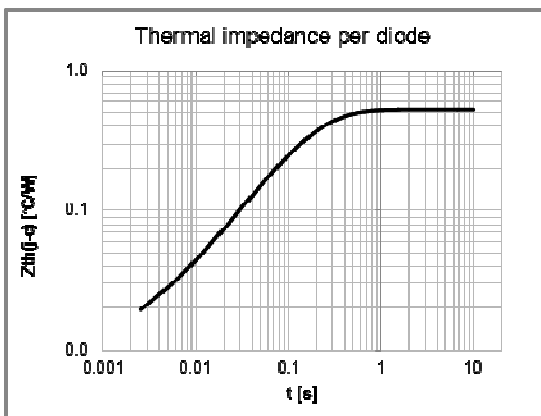
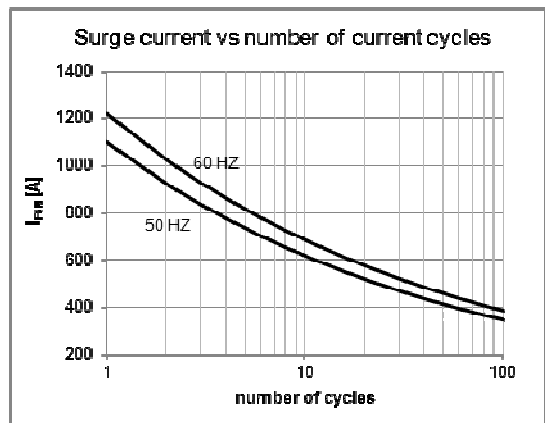
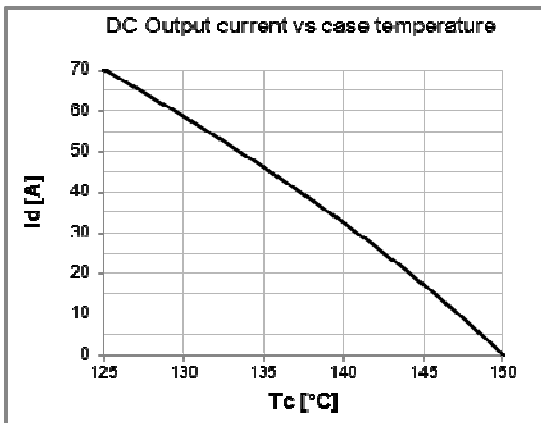
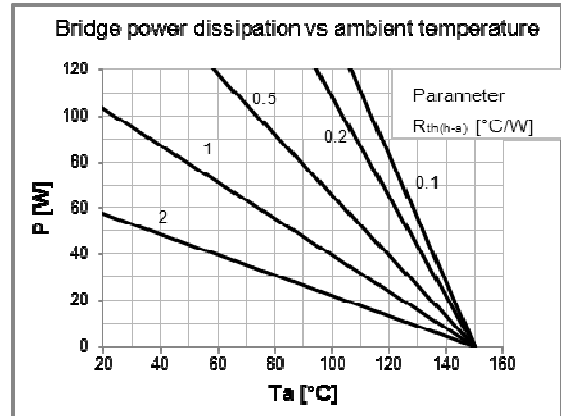
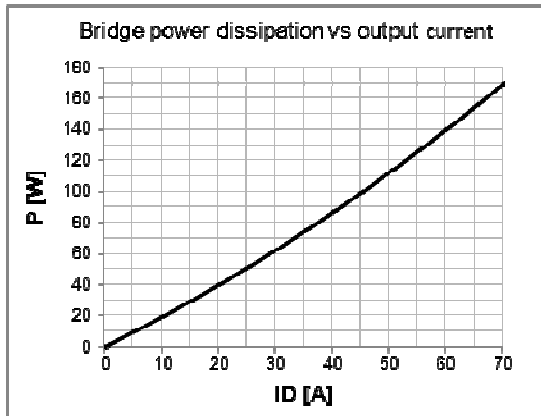
Low forward voltage diodes for high surge capability
 Low thermal impedance packaging
 Electrically insulated case

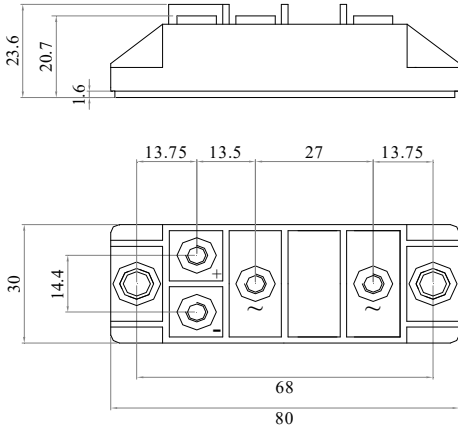
Applications

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
BM70.04-SS5-FIX5-HP-P68-TA

Code:BM60000700003

BM70.06-SS5-FIX5-HP-P68-TA

Code:BM60000700011

BM70.08-SS5-FIX5-HP-P68-TA

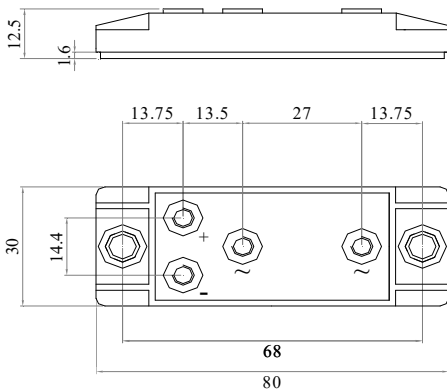
Code:BM60000700019

BM70.12-SS5-FIX5-HP-P68-TA

Code:BM60000700027

BM70.16-SS5-FIX5-HP-P68-TA

Code:BM60000700035


Fig.2
BM70.04-SS5-FIX5-LP-P68-TA

Code:BM60000700002

BM70.06-SS5-FIX5-LP-P68-TA

Code:BM60000700010

BM70.08-SS5-FIX5-LP-P68-TA

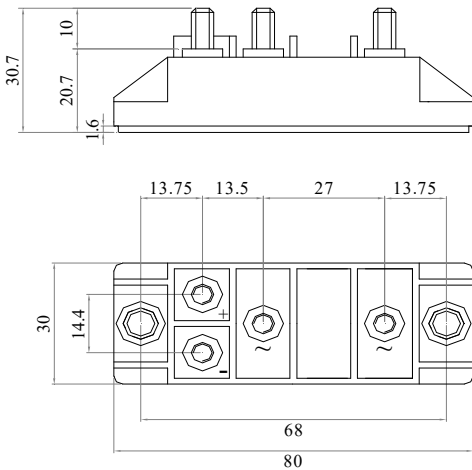
Code:BM60000700018

BM70.12-SS5-FIX5-LP-P68-TA

Code:BM60000700026

BM70.16-SS5-FIX5-LP-P68-TA

Code:BM60000700034


Fig.3
BM70.04-MM5x10-FIX5-HP-P68-TA

Code:BM60000700001

BM70.06-MM5x10-FIX5-HP-P68-TA

Code:BM60000700009

BM70.08-MM5x10-FIX5-HP-P68-TA

Code:BM60000700017

BM70.12-MM5x10-FIX5-HP-P68-TA

Code:BM60000700025

BM70.16-MM5x10-FIX5-HP-P68-TA

Code:BM60000700033

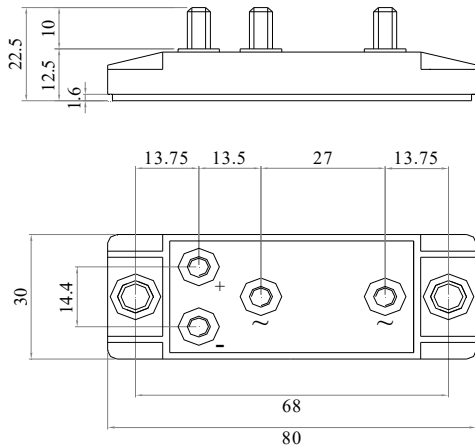
Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V
Power fix:

SS=Screw (M5)

MM=Bolt (M5)

Mounting fix:

 FIX= \varnothing 5,5


Fig.4
BM70.04-MM5x10-FIX5-LP-P68-TA

Code:BM60000700000

BM70.06-MM5x10-FIX5-LP-P68-TA

Code:BM60000700008

BM70.08-MM5x10-FIX5-LP-P68-TA

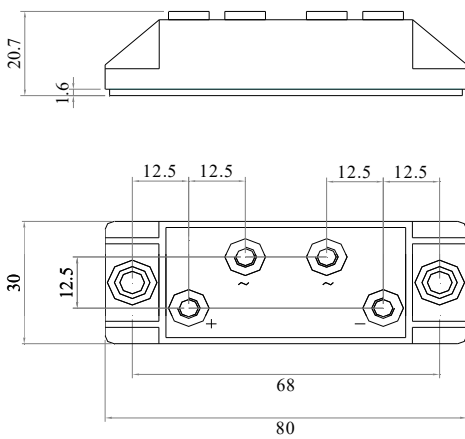
Code:BM60000700016

BM70.12-MM5x10-FIX5-LP-P68-TA

Code:BM60000700024

BM70.16-MM5x10-FIX5-LP-P68-TA

Code:BM60000700032


Fig.5
BM70.04-SS5-FIX5-HP-P68-TB

Code:BM60000700007

BM70.06-SS5-FIX5-HP-P68-TB

Code:BM60000700015

BM70.08-SS5-FIX5-HP-P68-TB

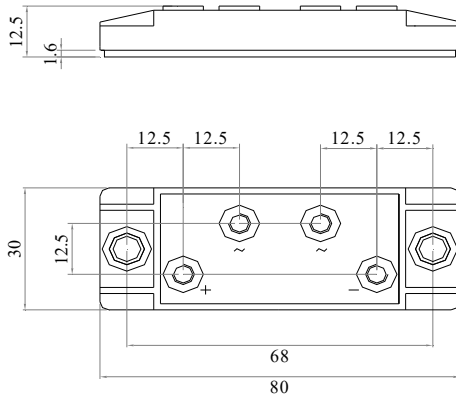
Code:BM60000700023

BM70.12-SS5-FIX5-HP-P68-TB

Code:BM60000700031

BM70.16-SS5-FIX5-HP-P68-TB

Code:BM60000700039


Fig.6
BM70.04-SS5-FIX5-LP-P68-TB

Code:BM60000700006

BM70.06-SS5-FIX5-LP-P68-TB

Code:BM60000700014

BM70.08-SS5-FIX5-LP-P68-TB

Code:BM60000700022

BM70.12-SS5-FIX5-LP-P68-TB

Code:BM60000700030

BM70.16-SS5-FIX5-LP-P68-TB

Code:BM60000700038

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

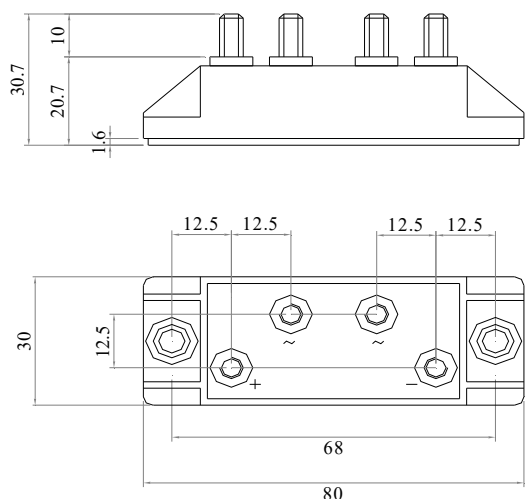


Fig.7 *BM70.04-MM5x10-FIX5-HP-P68-TB*
 Code:BM60000700005
BM70.06-MM5x10-FIX5-HP-P68-TB
 Code:BM60000700013
BM70.08-MM5x10-FIX5-HP-P68-TB
 Code:BM60000700021
BM70.12-MM5x10-FIX5-HP-P68-TB
 Code:BM60000700029
BM70.16-MM5x10-FIX5-HP-P68-TB
 Code:BM60000700037

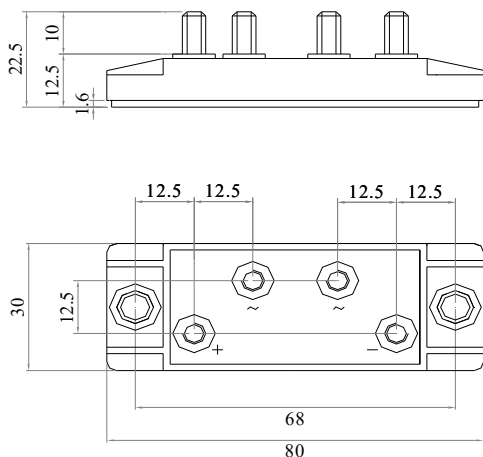


Fig.8 *BM70.04-MM5x10-FIX5-LP-P68-TB*
 Code:BM60000700004
BM70.06-MM5x10-FIX5-LP-P68-TB
 Code:BM60000700012
BM70.08-MM5x10-FIX5-LP-P68-TB
 Code:BM60000700020
BM70.12-MM5x10-FIX5-LP-P68-TB
 Code:BM60000700028
BM70.16-MM5x10-FIX5-LP-P68-TB
 Code:BM60000700036

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