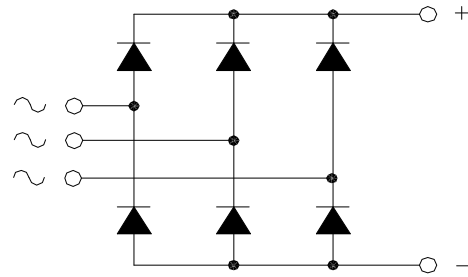




## DBM70

### POWER RECTIFIER BRIDGE

Output Current **70 A**



$V_{RRM}$	$V_{RSM}$	P/N
400	500	DBM70.04
600	700	DBM70.06
800	900	DBM70.08
1200	1300	DBM70.12
1600	1700	DBM70.16

#### Features

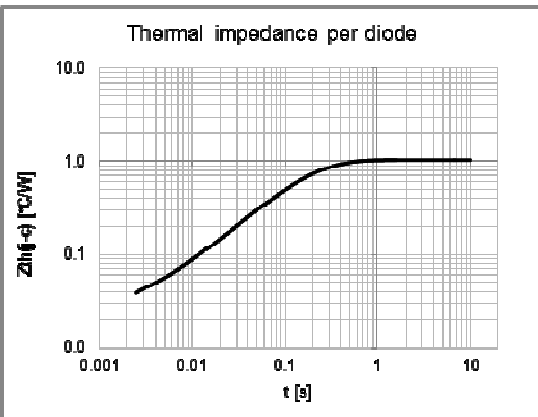
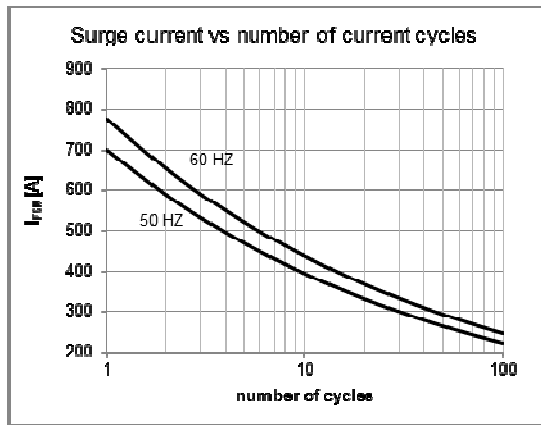
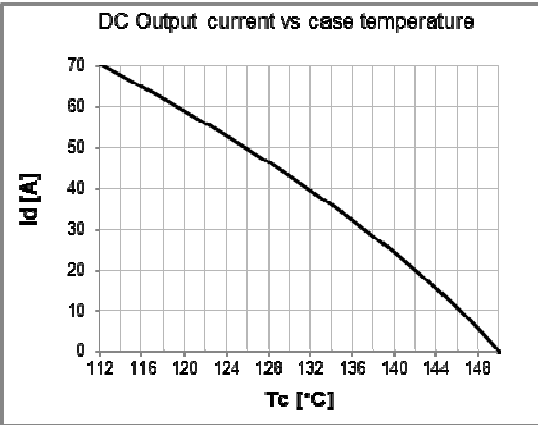
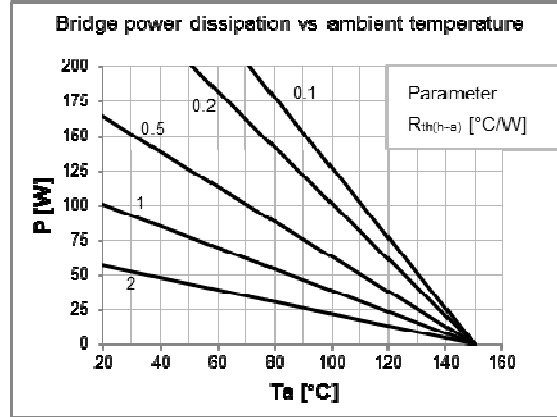
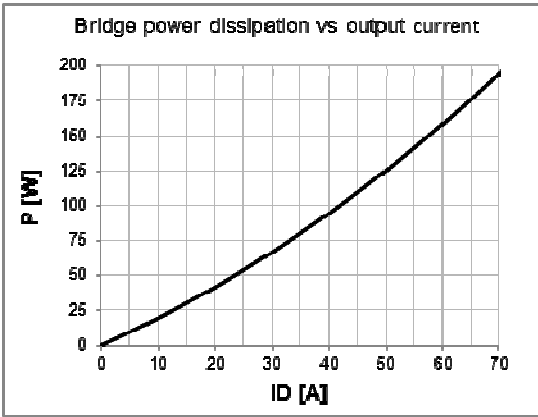
Low forward voltage diodes for high surge capability  
 Low thermal impedance packaging  
 Electrically insulated case

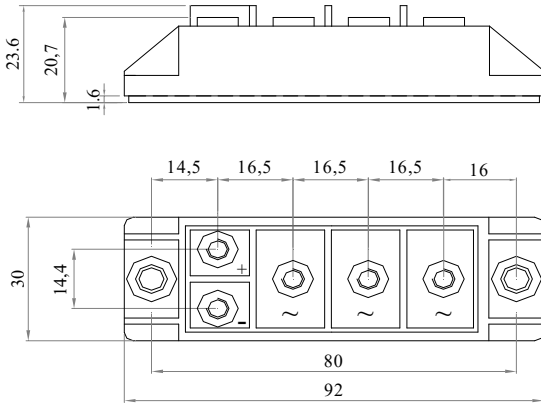
#### Applications

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

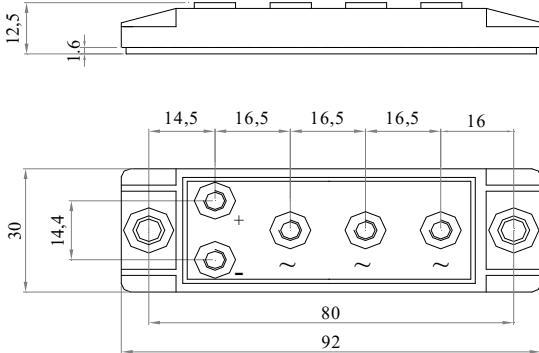
Diodes characteristics		Conditions	$T_J$ [°C]	Value
$I_{RRM}$	Max repetitive peak reverse current	$V = V_{RRM}$	150	4 mA
$V_{F(TO)}$	Threshold voltage		150	0,9 V
$r_F$	Forward slope resistance		150	7,0 mΩ
$V_{FM}$	Peak forward voltage, max	$I_F = 100A$	25	1,7 V
$I_{FSM}$	Surge forward current	Half sine wave, 10 ms	150	700 A
$I^2t$	Max $I^2t$ for fusing		150	2450 A <sup>2</sup> 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 120° conduction		1,16 °C/W

Module characteristics		Conditions	Value
$I_D$	DC output current	$T_c = 112$ °C	70 A
$I_D$	DC output current	$T_a = 40$ °C ; freely suspended	6 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	0,174 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rect. wave 120° conduction	0,193 °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	3,5 °C/W
$T_{stg}$	Max storage temperature		150 °C
$M_1$	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**

- DBM70.04-SS5-FIX5-HP-P80-TA*  
Code:DBM70000700003
- DBM70.06-SS5-FIX5-HP-P80-TA*  
Code:DBM70000700011
- DBM70.08-SS5-FIX5-HP-P80-TA*  
Code:DBM70000700019
- DBM70.12-SS5-FIX5-HP-P80-TA*  
Code:DBM70000700027
- DBM70.16-SS5-FIX5-HP-P80-TA*  
Code:DBM70000700035

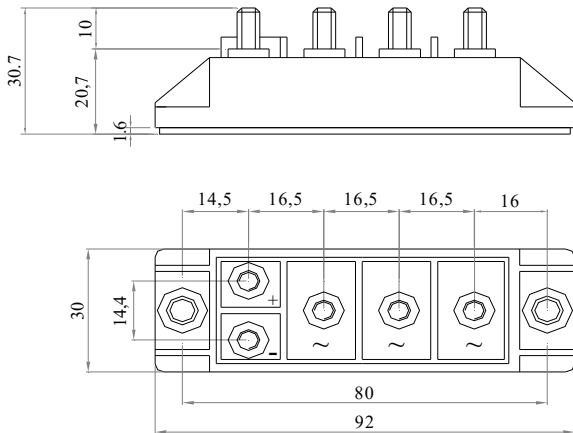

**Fig.2**

- DBM70.04-SS5-FIX5-LP-P80-TA*  
Code:DBM70000700002
- DBM70.06-SS5-FIX5-LP-P80-TA*  
Code:DBM70000700010
- DBM70.08-SS5-FIX5-LP-P80-TA*  
Code:DBM70000700018
- DBM70.12-SS5-FIX5-LP-P80-TA*  
Code:DBM70000700026
- DBM70.16-SS5-FIX5-LP-P80-TA*  
Code:DBM70000700034

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

**Power fix:**  
SS=Screw (M5)

**Mounting fix:**  
FIX= Ø5,5


**Fig.3**
**DBM70.04-MM5x10-FIX5-HP-P80-TA**

Code:DBM70000700001

**DBM70.06-MM5x10-FIX5-HP-P80-TA**

Code:DBM70000700009

**DBM70.08-MM5x10-FIX5-HP-P80-TA**

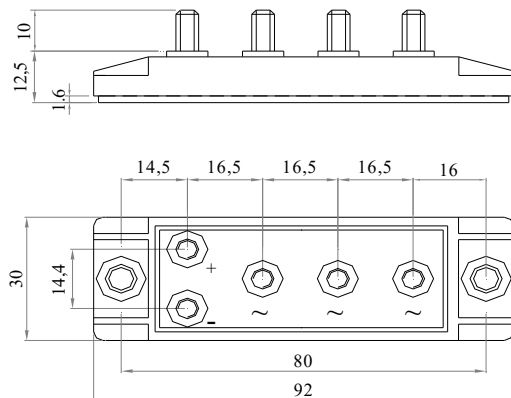
Code:DBM70000700017

**DBM70.12-MM5x10-FIX5-HP-P80-TA**

Code:DBM70000700025

**DBM70.16-MM5x10-FIX5-HP-P80-TA**

Code:DBM70000700033


**Fig.4**
**DBM70.04-MM5x10-FIX5-LP-P80-TA**

Code:DBM70000700000

**DBM70.06-MM5x10-FIX5-LP-P80-TA**

Code:DBM70000700008

**DBM70.08-MM5x10-FIX5-LP-P80-TA**

Code:DBM70000700016

**DBM70.12-MM5x10-FIX5-LP-P80-TA**

Code:DBM70000700024

**DBM70.16-MM5x10-FIX5-LP-P80-TA**

Code:DBM70000700032

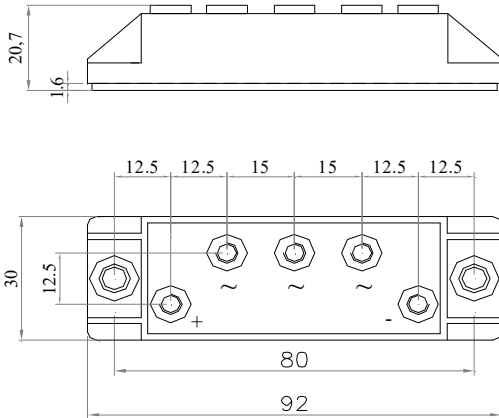
**Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V**
**Power fix:**

MM=Bolt (M5)

**Mounting fix:**

FIX= Ø5,5

(dimensions in mm)



**Fig.5** DBM70.04-SS5-FIX5-HP-P80-TB

Code:DBM70000700007

DBM70.06-SS5-FIX5-HP-P80-TB

Code:DBM70000700015

DBM70.08-SS5-FIX5-HP-P80-TB

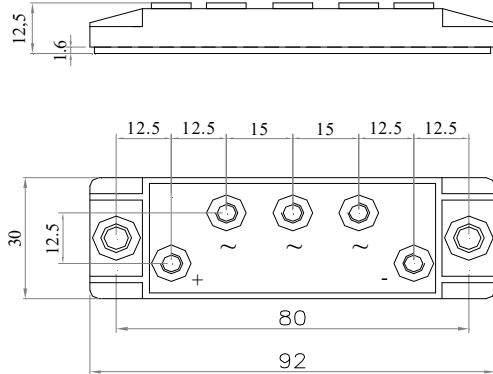
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DBM70.12-SS5-FIX5-HP-P80-TB

Code:DBM70000700031

DBM70.16-SS5-FIX5-HP-P80-TB

Code:DBM70000700039



**Fig.6** DBM70.04-SS5-FIX5-LP-P80-TB

Code:DBM70000700006

DBM70.06-SS5-FIX5-LP-P80-TB

Code:DBM70000700014

DBM70.08-SS5-FIX5-LP-P80-TB

Code:DBM70000700022

DBM70.12-SS5-FIX5-LP-P80-TB

Code:DBM70000700030

DBM70.16-SS5-FIX5-LP-P80-TB

Code:DBM70000700038

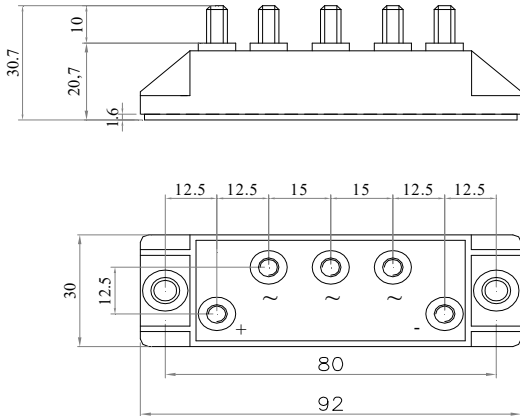
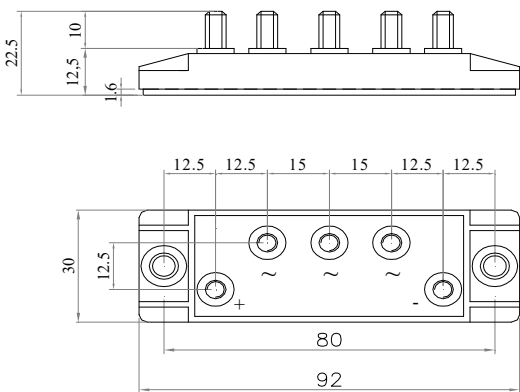
**Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V**

**Power fix:**

SS=Screw (M5)

**Mounting fix:**

FIX=  $\varnothing$ 5,5


**Fig.7**
**DBM70.04-MM5x10-FIX5-HP-P80-TB**
**Code:DBM70000700005**
**DBM70.06-MM5x10-FIX5-HP-P80-TB**
**Code:DBM70000700013**
**DBM70.08-MM5x10-FIX5-HP-P80-TB**
**Code:DBM70000700021**
**DBM70.12-MM5x10-FIX5-HP-P80-TB**
**Code:DBM70000700029**
**DBM70.16-MM5x10-FIX5-HP-P80-TB**
**Code:DBM70000700037**

**Fig.8**
**DBM70.04-MM5x10-FIX5-LP-P80-TB**
**Code:DBM70000700004**
**DBM70.06-MM5x10-FIX5-LP-P80-TB**
**Code:DBM70000700012**
**DBM70.08-MM5x10-FIX5-LP-P80-TB**
**Code:DBM70000700020**
**DBM70.12-MM5x10-FIX5-LP-P80-TB**
**Code:DBM70000700028**
**DBM70.16-MM5x10-FIX5-LP-P80-TB**
**Code:DBM70000700036**
**Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V**
**Power fix:**
**MM=Bolt (M5)**
**Mounting fix:**
**FIX=  $\varnothing$ 5,5**